

1980

The role of need affiliation in the social exchange of friendship rewards.

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THE ROLE OF NEED AFFILIATION IN THE
SOCIAL EXCHANGE OF FRIENDSHIP REWARDS

by



Mary Frances Laratta Draper
B. A. Brock University, 1976

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at
The University of Windsor

Windsor, Ontario, Canada

1980

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ABSTRACT

The present study has three broad objectives: (1) to explore the role of affiliation in motivational models of Expectancy and Equity that have been found useful in the prediction of friendship growth, (2) to explore dyadic interaction patterns along selected parameters and their consequences for the growth of friendship, and (3) to develop and assess the validity of a new scoring procedure based on content analysis of thematic projective material for the purpose of measuring the intensity of affiliation.

An underlying assumption of the present study is that affiliation is a motive about which an individual may be in conflict. It is this conflict which may determine how affiliatively one behaves toward another and how one thinks about or perceives interpersonal transactions. The scales presented here represent an attempt to tap more precisely the true extent of affiliative conflict by means of an assessment of its more unconscious elements and its intensity. The TAT is particularly useful in elucidating a conflict analysis of drives.

Expectancy Theory predicts that individuals who over-reward in social situations may induce inequity for the purpose of increasing the level of friendship, that is, to compel others through obligation to reciprocate to still higher levels of intimacy. Equity Theory postulates that inequity in the form of either overreward or underreward is psychologically distressing and is inimical to friendship growth. The arousal

of Tension under conditions of inequity is a critical intervening variable in Equity Theory.

Results indicate that n-affiliation did not play a significant mediating role in either Equity or Expectancy Theories. Instead, the impact of affiliation on the friendship model tended to be more direct. It correlated significantly with Overreward, Reward Input, Reward Outcome and Tension. Tension did not mediate the relationship between Overreward and Level of Friendship as Equity Theory predicts. Overreward was not perceived as inequitable and strong affiliative need seemed not to intrude differentially upon this perception.

With regard to dyadic interaction patterns, the independent measures which yielded the greatest number of significant relationships were Conflict, Instrumental Expectancy, Friendship Index, Reward Input, Reward Outcome and Distortion. Distortion in reward allocations, in particular, was highly predictive, yielding seven out of eight significant effects. These results highlight the importance of reciprocity in social exchange. The finding of increased Tension accompanying friendship growth was discussed in terms of vigilance. Tension may be an arousal mechanism sensitizing the individual to positive interpersonal cues, and may relate to accuracy in social perception.

The method of conflict assessment achieved some success by uncovering significant correlations between c-affiliation and Affect, Friendship Index, Expectancy, Overreward and Own Effort.

Conclusions were that individual differences as intervening variables in the friendship model exerted minimal effects, that dyadic indices were a useful parameter of the amount of distortion in interaction patterns and intensity was a useful dimension along which to consider the strength of TAT-assessed affiliative drive. This study has underscored the validity of conceptualizing conflict in approach-avoidance terms.

ACKNOWLEDGEMENTS

I wish to express my deepest gratitude to Dr. John La Gaipa, whose guidance and encouragement were invaluable contributions in the preparation of this research. A very special thanks also goes out to Dr. Frank Auld for his assistance in the development of the Affiliation scales. My gratitude also goes out to Dr. Mary Lou Dietz for her many helpful suggestions as committee member. I would also like to acknowledge the contribution of my husband, Doug, in establishing reliability indices. His patience and encouragement as well as that of my family must be applauded.




TABLE OF CONTENTS

	Page
ABSTRACT	ii
ACKNOWLEDGEMENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
I INTRODUCTION	1
Overview	1
Review of the Literature	1
Thematic Apperception Test	3
Social Exchange Theory	14
Equity Theory	16
Expectancy Theory	20
Expectancy Theory vs Equity Theory	22
Statement of the Problem	24
Objectives of the Study	25
The Role of Individual Differences	26
Dynamics of Overreward	27
Need for Affiliation and Interpersonal Attraction	30
Equity Theory, Need for Affiliation and Tension	32
Rationale for the New TAT Scales	33
Predictions	36
II METHOD	40
Subjects	40
Administration	40
Instruments	41
III RESULTS	52
Inter-rater reliability	52

TABLE OF CONTENTS (Continued)

CHAPTER		Page
III	RESULTS	
	Analyses of Data	53
	Sex Differences	60
	Dyadic Analyses	60
IV	DISCUSSION AND CONCLUSIONS	84
	Monadic Patterns	84
	Social Exchange Theory	85
	Sex Differences	86
	Dyadic Similarity Patterns	88
	The TAT Affiliation Scales	91
	Limitations of the Study	94
	Implications for Further Research	95
APPENDIX		
A	TAT CARDS TAPPING AFFILIATION	97
B	MULTIVARIATE ANALYSES	104
REFERENCES		107
VITA AUCTORIS		113

LIST OF TABLES

Table		Page
1	Correlations among TAT Affiliation Measures and Other Friendship Variables	56
2	Prediction of Level of Friendship after Controlling for Need Affiliation	59
3	Prediction of Overreward after Controlling by Selected Variables	61
4	Sex Differences in TAT Affiliation Measures	62
5	Sex Differences in Dependent Measures	62
6	Summary Table of F Values: Effect of Dyadic Similarity on the Dependent measures by Sex	81

LIST OF FIGURES

Figure		Page
1	The model of friendship formation	37
2	The effect of similarity in n-affiliation on the dependent measures	65
3	The effect of similarity in f-affiliation on the dependent measures	66
4	The effect of similarity in c-affiliation on the dependent measures	67
5	The effect of similarity in the Receive/Give Index on the dependent measures	69
6	The effect of similarity in Valence on the dependent measures	70
7	The effect of similarity in Roommate Fairness on the dependent measures	71
8	The effect of similarity in Equity on the dependent measures	72
9	The effect of similarity in Instrumental Expectancy on the dependent measures	74
10	The effect of similarity on the Friendship Index on the dependent measures	75
11	The effect of similarity in Reward Input on the dependent measures	77
12	The effect of similarity in Reward Outcome on the dependent measures	78
13	The effect of Distortion on the dependent measures	79

CHAPTER I

INTRODUCTION

Overview

Research on the formation and development of friendship has tended to emphasize the influence of social and cultural factors (Kerckhoff, 1974; Levinger, 1974). Through these conceptualizations, predictions as to the kind of friendships likely to evolve have been generated in the absence of knowledge about the personalities of the participants. Levinger (1974), in particular, has proposed the notion that social norms dictate, to a large extent, people's expectations in social relations and that such norms define the importance of friendship behavior at different stages of intimacy.

The present study represents an attempt to explore the role of personality in determining the nature and development of friendship. More precisely, it seeks to explore the impact of individual differences on the perception of friendship reward exchanges and its consequences for the growth of friendship.

Review of the Literature

Chapter One is divided into four parts. Part One reviews the research surrounding the development of the Thematic Apperception Test (TAT), a projective technique which taps both unconscious and preconscious modes of personality functioning. Through its portrayal of ambiguous social situations, the TAT

can reveal much about the individual's fundamental conceptions of interpersonal relationships, including his underlying fears of rejection and abandonment associated with movement toward significant others. This test will be used to measure the intensity of such personality dimensions as need for affiliation (n-affiliation), fear of affiliation (f-affiliation), and conflict in affiliation (c-affiliation). These dimensions may predispose individuals to establish satisfying interpersonal relationships or disrupt their development.

These personality characteristics have been among those studied through more direct self-report measures. However, the unconscious operation of defense mechanisms may intrude upon conscious verbal reports of need states in such a way as to obscure the true extent of their intensity. Indeed, the literature suggests that there is relatively little overlap between self-report and projective test data, particularly when there is conflict associated with the expression of need states and when there is evidence of psychopathology disrupting social cognition.

The TAT is particularly useful in elucidating material relevant to a conflict analysis of motivational states. Atkinson (1958) has devised a scheme for the assessment of the approach and avoidance components of affiliative drive. However, the present writer believes that such a scheme is not sensitive enough to indications of conflict that a good clinician can respond to. Therefore, Atkinson's scheme will be supplemented

by a more clinically-oriented content-analysis scheme.

Part Two deals with the general concept of social exchange and with reciprocity as a specific pattern of exchange. The notion of balance in the exchange of intrinsic social rewards is considered central to the growth of the relationship.

Part Three deals with the application of two motivational theories, Equity Theory and Expectancy Theory, to La Gaipa's (1977) model of friendship formation. These theories generate somewhat different predictions concerning the growth of friendship. Equity Theory hypothesizes that the growth of friendship is dependent upon or is a function of the extent to which individuals can maintain favorable outcome-input ratios in their interpersonal transactions. Expectancy Theory, on the other hand, postulates that inequity may not be inimical to friendship growth and that, in fact, a person may be inclined to behave inequitably, i.e., to overreward in social situations, in order to increase the likelihood of friendship development.

Part Four presents the statement of the problem. The objectives of the study and the underlying rationale may be found here.

The Thematic Apperception Test

The assumption which guided the development of the TAT was that motives, needs and fantasies are projected onto ambiguous materials, i.e., onto test materials that obscure the meaning of the subject's responses. In the words of H.A. Murray (1938), to whom the development of the TAT is credited,

The test is based upon the well-recognized fact that when a person interprets an ambiguous social situation, he is apt to expose his own personality as much as the phenomenon to which he is attending... [He] is disclosing certain inner tendencies and cathexes: wishes, fears, and traces of past experiences (p. 52).

That the TAT can serve as a measure of fantasy has been the point of departure for a massive volume of research done within the last several decades (Zubin, Eron and Schumer, 1965). As a projective instrument, the TAT can reveal much about the subject's characteristic pattern of interactions with others and his fundamental conceptions of interpersonal relationships, including the motives and fears he ascribes to himself and others and the explanations he offers as to why people behave as they do (Rabin, 1968). Research by Lindzey (1958) on the "hero assumption", offers compelling evidence that the hero of the stories does indeed behave toward others as the story-teller would in real life, and that the story-teller identifies with one person rather than with several persons mentioned within a particular narrative. The TAT, then, is particularly suited for the study of n-affiliation because of its capacity to elicit material pertinent to an analysis of interpersonal conceptions.

Information contained in the TAT can, in many instances, supplement or clarify that which can be learned from self-report measures or from less-disguised projective tests. Fitzgerald (1958), for example, found the TAT superior to Rotter's Incomplete Sentence Blank in furnishing insights into the importance of conflict about n-dependency. Conflicts related to particular need states can, in certain instances, become

shielded from conscious self-judgments by the invocation of defense mechanisms. Because of the TAT's particular sensitivity to repressed or suppressed material, the nature of such conflicts can often come to light. Sherwood (1966) found low intercorrelations between self-report and TAT measures for n-achievement and n-affiliation, suggesting that each measure was measuring somewhat different components of the variance in motivation. This relationship obtained most dramatically for males, for whom there is conflict, the author suggests, about admitting the importance of intimacy in friendship as part of the masculine role. Similarly, Dalack (1965) reported a positive correlation between the extent of psychopathology and the increasing discrepancy between TAT-assessed and self-report hostility. In further support of these observations, Rogers (1973) found no systematic relationship between a projective method and a self-report measure of need strength for a variety of needs including dependency, achievement, and affiliation.

One of the most important demands made of projective techniques like the TAT is that they be valid indicators of criterion behavior. In order to do this, it is necessary to specify the relationship between fantasy expression of needs on the TAT and their manifestation in overt behavior. The relationship has by no means been found to be a simple one and has highlighted the need to consider not only positive indications in motivation on the TAT but also the negative, internal sanctions against expressing unacceptable aspects of these

needs. In other words, it is important to consider both the positive and negative aspects of motivational states in projective responses. Internal conflicts about the desirability of entering into interpersonal relationships may colour people's perceptions of social events. Although the present study is not directly concerned with overt behavior, but with the perceptions of overt, affiliative behavior, in view of the intimate relationship between perceptions of social events and how people are actually likely to behave in social interactions, it may be fruitful to consider and summarize the voluminous literature on the TAT's relationship to overt behavioral indices.

Theories relating fantasy expression within the TAT to overt expression in behavior can be profitably categorized as belonging to one of two contradictory classes. Those classes are (a) the direct-expression theories, and (b) the substitute-expression theories.

The direct-expression theory. This kind of theory is derived from a learning model that treats fantasy as a form of covert behavior that has been built up through learning. According to such a theory, one expresses the same tendencies in fantasy as one would in overt behavior. Such a representational formulation would predict a positive correlation between TAT fantasy productions and behavior. Auld (1954) spelled out a formulation of this type, in his argument for applying behavioral principles to an analysis of TAT protocols in order to better predict the behavior in real-life. In order to do

that, Auld claims, predictions must be based not only on knowledge of the criterion situation, but on knowledge as to how similar or dissimilar the stimuli in the test situation are to those of the origin situation. Responses to TAT material, he argues, are derived from emotional habits learned in the original learning situation.

Another example of a direct-expression theory is given in the work of J.W. Atkinson and co-workers. Arguing within an expectancy-valence framework, Atkinson theorized that motives are aroused and manifested in overt behavior when a cognitive expectancy of goal attainment is aroused. The expectancy of motive satisfaction is postulated as the basis for motive arousal.

Building largely on his research on the achievement motive, Atkinson (1958) proposed a now well-known motivational model for relating the joint influence of personality, situational, and stimulus variables on a person's tendency to engage in goal-oriented behavior. All striving, he submits, is a multiplicative function of the strength of a given motive, the probability of goal attainment, and the incentive value of the goal or the degree of satisfaction derivable from goal attainment.

Research on the affiliative motive has identified two independent components of the motive, one related to goal attainment, and the other related to threats connected with affiliative striving. Goal-oriented affiliation refers to the desire to establish warm, friendly interpersonal relations.

Threat-oriented affiliation refers to concern about the dissolution of an interpersonal relationship.

In the pioneering study by Shipley and Veroff (1952), college freshmen in whom fear of rejection had been aroused by their participation in a sociometric rating procedure, had significantly higher levels of separation imagery than non-aroused controls. Atkinson, Heyns and Veroff (1954), however, proposed a broader definition of affiliative imagery when separation anxiety alone failed adequately to discriminate between affiliatively-aroused and non-aroused subjects. In the arousal group, both hope of affiliation (approach) and fear of rejection (avoidance) were activated. The subsequent scoring system developed by Atkinson (1958) reflects this dichotomy presented in the experimental literature. Thus, the n-affiliation score is intended to measure (a) a sensitivity to criticism, rejection, and negative evaluation and (b) a predisposition toward forming satisfying interpersonal relationships.

D. Fishman (1966), the first investigator to vary the expectancy variable systematically, obtained results that lend broad support to Atkinson's theory that affiliative behavior is a function of both affiliative need strength and high generalized affiliative expectancy. Subjects were classified as having high expectancy if they anticipated positive reinforcement from others in a small-group interaction. Low expectancy subjects anticipated that interaction with others would be predominantly negative. Fishman found

a significant positive correlation between the subjects' n-affiliation scores and the percent of interpersonal actions of subjects that were judged to be positive when observed through a one-way mirror. The positive and negative n-affiliation scores were found to have distinct behavioral concomitants when expectancy was systematically aroused. The positive n-affiliation score accounted for almost all of the predictive utility of the total n-affiliation measure. The negative affiliation score reflected both affiliative need strength and low generalized expectancy.

Going beyond the explanations offered by Fishman for the results in the study, de Charms (1957) offered the hypothesis that "differential experiences of acceptance in the past", which in turn affect the expectancy of subsequent punishment or reward from others, can almost entirely distinguish goal from threat-oriented motivation.

The substitute-expression theory. These are many instances when needs are not directly reflected in apperceptive fantasy in the fashion indicated above. Instead one finds evidence for a particular need state in fantasy and an absence of striving behavior with respect to that need. The substitute-expression theory, derived from the energy model of psychoanalytic theory, holds that when satisfaction of needs is blocked, these needs tend to be expressed in the form of imaginary wish-fulfillment. Fantasy expression is a substitute for action. The findings of Matranga (1976), who reported an inverse relationship between (a) hostile content

on the TAT and (b) ratings of aggressive behavior in adolescent males, seem to be consistent with such a hypothesis. Matranga argued that fantasy expression of aggression served as a means of controlling overt aggression. This notion seems to be akin to that of Feshbach (1955), who suggested that fantasy expression serves a drive-reducing function. Subjects in whom aggressive arousal was induced by insulting them displayed less overt aggression toward the experimenter (a confederate) but more aggressive imagery on the TAT. In a similar vein, Fitzgerald (1958), investigating the relationships among projective tests, interviews, and sociometric ratings of dependent behavior, concluded that the TAT is "not particularly useful as a source of inferences about overt behavior", but can be helpful in elucidating information relating to conflict in a given need area.

Feshbach (1961) has attempted to deal with the TAT's low capability for predicting overt behavior. He attempted to clarify the problem in this way:

It is by now evident that we should not expect to find a simple, uniform relationship between "covert" fantasy expression of a motive and "overt" behavioral expression. The proper question is not "What is the relationship?" but rather under what conditions would we expect to find a positive, inverse, or negligible correlation (p. 137).

Ego-controlling processes. A large body of research findings is consistent with the notion that TAT material does not directly reflect need states per se but rather need states as modified by ego-defensive processes (Feshbach, 1961; Lazarus, 1961; Zubin, Eron and Schumer, 1965). Lazarus (1961)

had these comments about the principles that underlie fantasy:

The defensive principle of apperceptive fantasy applies when the level of need is high enough to arouse considerable anxiety, blocked from direct motoric discharge either by environmental obstacles or by equally powerful internal conflicting needs (p. 67).

The TAT product is, in other words, the resultant of the transformation of fear, guilt, and anxiety. Feshbach suggests that the inhibition of drive through fear or guilt can reveal itself as heightened fantasy imagery and decreased overt manifestations, given a lack of awareness of one's drive and of projective processes in general. However, the clinician is oftentimes faced with the problem of inferring strong drive from the absence of relevant ideational products as well as from their presence.

Clark (1952) was able to demonstrate the inhibitory effects of guilt upon the production of manifest sexual imagery. Male college students who were sexually aroused by slides of nude females gave significantly less evidence of sex or guilt in their stories than non-aroused controls. Presumably, the results could be explained as being purely the product of compensation; that is to say, guilt associated with sex triggered the operation of inhibition which in turn was able to reduce guilt by repressing sexual imagery. In a similar study of the effects of TAT-assessed inhibition on behavior, Pittlick (1950) demonstrated that the presence of defensive mechanisms such as denial, displacement, and repression consistently correlated with the tendency to inhibit overt

aggression. Experiments by Megargee (1967) and Matranga (1976) have led to similar conclusions. It is not the absolute frequency of aggressive fantasy responses which can predict real-life aggressive behavior but the extent to which such responses have been transformed by the workings of anxiety. When the defenses against the expression of aggression are taken into account, the thematic projective measure of aggression more accurately predicts various aspects of overt behavior.

Approach-avoidance conflict. Feshbach (1961) has made the claim that approach-avoidance conflicts can lead to defensive responses. Auld (1954) anticipated such a conclusion by suggesting that a consideration of the balance of approach and avoidance tendencies can yield information concerning the likelihood of an overt response and the extent to which the subject will act on his approach tendencies.

These views grew out of the highly influential work of Neal Miller (1948, 1959), who initiated a program of the theoretical and experimental analysis of conflict behavior. Observing that conflict in experimental (laboratory) situations was typical of such behavior in a wide range of clinical situations, Miller conceptualized a state of conflict as existing when the tendency to avoid a particular goal object is as strong as the tendency to approach that goal. This formulation is consistent with Tomkins' (1947) view that conflicts are pathogenic when opposite pressures are evenly balanced. The tendency for the repressed wish to return is

is greatest at this point.

In a conflict study of TAT fantasy aggression, Lesser (1958) was able to improve even further upon the correlation between the fantasy measure and its overt manifestations by developing a ratio index of the strength of aggressive need to strength of anxiety about expressing aggression. This index yielded a more substantial correlation with the incidence of overt aggression than when either the aggression (approach) or the aggression-anxiety (avoidance) measures were reconsidered separately.

To summarize the review of the literature thus far, the issue of whether motives expressed in fantasy will also be expressed in behavior has proceeded from a discussion of the direct-expression to the substitute-expression hypotheses. The direct-expression theory postulates that the relationship between projective fantasy and overt strivings is linear when the cognitive expectancy of goal attainment has aroused the latent motive relating to that drive. Atkinson (1958) and Fishman (1966) conclude that only the positive n-affiliation measure and not the negative (nor both measures) was correlated with overt behavior.

The substitute-expression theory, on the other hand, challenges such an assumption by pointing out that the relationship between projective fantasy productions and overt manifestations of drives is not a simple one and that one should take into account the strength of internal conflicting needs. The work of Miller (1948, 1959) provides even clearer

insight into this controversy by recommending that consideration be given to the balance of approach and avoidance drive in order to predict whether or not the motives will be expressed behaviorally.

Because one of the assumptions of the proposed research is that affiliation is a motive about which a person may be in conflict, it will be necessary to assess both positive affiliative drive and negative or conflicting drive, and the balance of these forces. It is this conflict which may determine how affiliatively one behaves toward another and how one thinks about or perceives interpersonal transactions. More specifically, affiliative conflict may have a strong bearing on how the individual perceives the mutual exchange of friendship reward inputs and outcomes.

Social Exchange Theory

Social exchange theories are concerned with the "giving" and "receiving" of rewards and benefits and the consequences of such exchanges on the growth of the relationship. Exchange is not simply the addition of the two processes of giving and receiving, but a third process that emerges when giving and receiving are simultaneously the cause and effect of each other (Simmel, 1950).

Blau (1967) has identified four conditions which affect processes of social exchange. These are (1) the particular stage in the development of the interaction, (2) the character of the relationship, (3) the nature of the rewards and costs incurred in social interactions between the exchange partners

and (4) the social context in which the exchange takes place. In studies concerned with the growth of friendship among roommates, Howitt (1975) and Heilbronn (1976) examined the role of social exchange in the setting of university dormitories. In reviewing this research, La Gaipa (1977) notes that support was obtained for the importance of the stage of the relationship and the nature of the rewards and costs.

A key notion in social exchange is that of reciprocity. This approach, more than many others, concerns reciprocity in relationships (i.e., each person seeks to maximize his rewards, while ensuring at the same time that the costs of the Other are not so high as to threaten the existence of the relationship). Exchange, then, involves reciprocal interaction for the purposes of mutual reward.

Reciprocity is a specific pattern of exchange which directs attention to the interdependence in allocation of rewards and services. A person for whom another has performed a service is expected to accept the overture, to express his gratitude and to reciprocate or return the favour in equitable proportion within an appropriate period of time. Gouldner (1960) has elevated the concept of reciprocity to the status of a social norm whose primary functions are to stabilize interaction patterns and to limit chaotic and exploitative transactions which may undermine social systems. As such, the norm of reciprocity is conceived as a social process of central importance in social life.

Gouldner has proposed that the norm of reciprocity

makes two interrelated minimal demands of its participants.

(1) People should help those who have helped them, and (2) people should not injure those who have helped them. The necessity perceived by individuals to reciprocate others for rewards received in order to continue receiving them serves as the starting mechanism of social interdependence (Gouldner, 1960). The perceived value of the benefit, and hence the debt incurred is in direct proportion and varies with (1) the intensity of the recipient's need at the time the benefit was bestowed, (2) the resources of the donor, (3) the motives imputed to the donor, and (4) the nature of the constraints which are perceived to exist or be absent. In other words, the nature of reciprocated rewards, and the expectations and motives underlying the allocations of reward exchanges can alter a relationship. Possible changes in the relationship due to lack of reciprocation can be considered within the realm of Equity Theory.

Equity Theory

Equity Theory (Adams, 1965) focuses attention on the consequences of "imbalance" in social exchange. Equity Theory maintains that a person attempts to establish a favorable balance in the ratio of inputs and outcomes with a comparable other. Inputs or investments may include one's age, education, seniority, and motivation. Outputs such as pay, fringe benefits and rewards accruing from one's investments. Equity Theory has been applied extensively in industrial settings.

What is of particular interest in determining the equity

of a particular input-outcome balance, according to Adams, is the individual's perception of what he is giving relative to what he is receiving whether or not it corresponds to other's perceptions or to actual ratios of exchange. An equitable relationship is said to exist when the individual scrutinizing the interaction perceives that all participants are receiving equal relative outcomes, i.e.,

$$\frac{\text{Outcomes A}}{\text{Inputs A}} = \frac{\text{Outcomes B}}{\text{Inputs B}}$$

Inequity can result from conditions of either overreward or underreward. Overreward or the perception that one has been rewarded in excess of one's contribution has as its psychological consequent the formation of guilt; underreward arouses the distressing state of dissatisfaction (Adams, 1965; La Gaipa, 1977). Inequity creates tension, a form of dissonance (Festinger, 1957) in proportion to the degree of inequity present. Moreover, this tension, a negatively valenced force, motivates the person to reduce inequity. Adams has proposed several mechanisms by means of which equity may be restored to a relationship. One may restore actual equity by appropriately altering (1) his own outcomes or inputs, or (2) the outcomes or inputs of the other. One may restore psychological equity by appropriately distorting (3) his perceptions of his own outcomes or inputs, or (4) his perceptions of the outcomes or inputs of the other.

Do both overreward and underreward produce comparable levels of tension? Adams (1965), Homans (1961), and Pritchard

(1969) suggest that the threshold for discomfort resulting from overreward was higher than that for underreward. Nevertheless, Equity Theory would make the prediction that a curvilinear relationship would exist between the amount of reward and the degree of satisfaction. A study by Howitt and La Gaipa (1975) attempted to investigate this very question. In a study of 350 roommates, these researchers asked questions like: "As compared to what you have given your roommate, how much understanding have you received?" A nine point scale was used whose small numbers indicated receiving "much less" through to "much more" as indicated by its polar end. Two criteria were used: (1) reported level of friendship and, (2) feelings of obligation. The predicted curvilinearity was not found using the attraction measure but a strong, linear relationship was obtained. These results, contrary to the predictions derived from Equity Theory, indicate that overreward was associated with higher levels of friendship and underreward with lower levels of friendship. These authors, however, did not examine the role of individual differences in terms of Equity Theory predictions.

Blau (1967) has introduced the notion of "strain for imbalance" in addition to a "strain for reciprocity" in interpersonal relationships in order to account for possible changes in the level of friendship over time. This "strain for imbalance" suggests that under certain circumstances, people will behave inequitably to further their own ends; that is to say, people will overreward others in order to

stimulate the growth of friendship. The notion of overreward seems to fit in or relates to the idea of "maximizing gain" in Expectancy Theory, about which more will be said. The circumstances under which people may feel compelled to create imbalance in reward exchange may be conceptualized as the following: First of all, individuals will overreward in social situations when they are reasonably confident that by doing so they will compel the other to reciprocate to still higher levels of friendship (Blau, 1967; Walster, Walster and Berschied, 1973). Secondly, this strategy may be used to test the viability of a friendship. Only by varying the equitableness of one's behavior can a person ascertain whether or not sanctions against inequity are still operating (Walster et al., 1973). Special mechanisms exist, therefore, to create and perpetuate obligation through reward imbalance and hence to strengthen states of indebtedness.

As stated previously, the acceptance of an overture and the reciprocation of the favour received tend to become the starting points of a deepening exchange relationship. However, a conflict exists between the obligation to reciprocate and the obligation to accept favours. Blau (1967) discusses the notion that a person who distributes important and needed services to others makes a claim for superior status by obligating them to himself. If the person adequately meets his obligation by reciprocating rewards that are at least as important as those he has received, then he successfully invalidates his partner's claim to superior status. The ability

to dispense valuable social rewards becomes a socially defined mark of superiority. Power considerations may strongly influence decisions to accept favors from others. In support of these views, Greenberg and Shapiro (1971) report evidence that subjects' expectations about whether or not they could reciprocate any help provided to them strongly affected their willingness to request help. Thus the following reasons may be advanced for subjects' unwillingness to accept friendly overtures (Walster et al., 1973):

(1) Such benefits place them in an inequitable relationship with the overrewarder. (2) To accept help means that one is obligated for an indefinite period of time to repay the overrewarder in unspecified ways. The overrewarder may want to extract greater repayment obligated for an indefinite period of time to repay the overrewarder in unspecified ways. The overrewarder may want to extract greater repayment than the recipient is willing to give. (3) The overrewarder may demand excessive gratitude or constant acknowledgment of his social or moral superiority from the recipient. One possible implication from the above is that the underrewarder perceives himself as having low ability with regard to his capacity to reciprocate social rewards received from others particularly when others are overrewarding.

Expectancy Theory

In order to account for changes in the level of friendship, a theoretical model is necessary that is based, in part, on motivational theory. Expectancy Theory, as applied

to social interactions, claims that individuals may over-reward in order to increase the probability of friendship growth.

Efforts to understand the intensity and direction of purposeful behavior have been aided by several motivational theories. Much of the thinking in this area has been generated by Tolman's (1955) Expectancy Theory, wherein the anticipation of reward energizes behavior. Goal-oriented action is conceived as the joint function of the strength of the motive and the expectancy aroused by situational cues that performance is instrumental to the attainment of the goal. The following theories represent amplifications of this early cognitive-expectancy theory.

Expectancy-valence model. Atkinson's (1958) expectancy model lays particular stress on the role played by individual differences in motivation. The basic assumption of the theory is that individuals vary in the strength of their motivation to approach a particular goal. The extent to which motivation is aroused is a joint function of the disposition to strive for a particular goal (a personality variable), the probability of goal attainment (cognitive expectancy) and its incentive value. Incentive or the reward-value associated with a particular goal is linearly related to the difficulty associated with goal attainment. The term motive refers to a latent disposition within the individual to strive toward a goal. As relatively-enduring, latent dispositions, motives do not manifest themselves directly in overt behavior.

Situational cues must first arouse the expectancy that one's actions will be met with success and it is this expectancy which activates the latent tendency. The term expectancy, then, refers to a particular kind of cognitive association aroused in a person by situational cues. The strength of this motivation has been assessed by Atkinson through content-analysis of projective material derived from the TAT.

Instrumentality-valence model. In another kind of expectancy model, Vroom (1958), who was concerned with employee job behavior, states that the force impelling a person toward effective job performance is a function of his expectancy that the actions will or will not lead to various outcomes (perceived instrumentality) and the valence he feels toward these outcomes. Expectancy is defined as a belief concerning the likelihood that a particular act will be followed by a particular outcome. Valence refers to the strength of an individual's preference for a particular outcome (either a positive or negative outcome). Outcomes acquire their valence as a function of the degree to which they are seen to be related to the needs of the person. Outcomes take on their valence value or importance as a result of their perceived instrumentality in achieving other outcomes.

Expectancy Theory Versus Equity Theory

Expectancy Theory and Equity Theory generate different predictions about performance in a paid work situation. Much of the research on overreward and underreward has dealt with extrinsic rewards such as money and not with intrinsic

social rewards. Expectancy Theory predicts that in an over-paid piece rate situation, the subject will increase his productivity and that the switch from the interval to the hourly pay system will result in decreased performance (Pritchard, Dunnette and Jorgensen, 1972). Expectancy, then, arouses primarily "gain Maximizing" motives (Adams, 1968).

Equity Theory, on the other hand, predicts that subjects who are inequitably paid will attempt to reduce the inequity and so the accompanying tension. In support of equity-oriented theory, Adams and Rosenbaum (1962) found that subjects paid by the piece and made to feel overrewarded decreased their productivity more than subjects made to feel equitably paid. Subjects decreased their input in order to restore equity. Moreover, when subjects were paid an hourly rate, overrewarded subjects increased their productivity. Increasing inputs is not a mode of equity reduction available to subjects paid by the piece because an increase in inputs means more pay, thereby increasing both their inputs and outcomes. The study by Leventhal, Allen and Kemelgor (1969) lends further support to the equity model. Equity Theory successfully predicted the manner in which co-workers allocated rewards. Subjects whose monetary outcomes were too large relative to their inputs decreased their share of reward, while those whose monetary outcomes were too small relative to their inputs increased their share.

There have been limited parallel applications of Expectancy and Equity Theories to the study of interpersonal transactions.

Identification of the antecedent conditions under which inequity techniques contribute to changes in friendship has not been undertaken. The issue of whether overreward by individuals in social situations induces inequity for the purpose of increasing the level of friendship (as predicted by Expectancy Theory) or whether overreward induces equity restoration has not been explored. In other words, is the issue one of tension reduction by restoring equity or one of "maximizing gain" in order to precipitate the growth of friendship? Moreover, the role of individual differences regarding the two motivational schemes is as yet unclear.

Statement of the Problem

One way of looking at the development of friendship is to conceptualize growth as involving step-like changes in which one person provides rewards and the other person reciprocates. In matching the amount received with the amount given, the relationship is propelled upward as the first person again provides an even greater amount of reward. This conceptualization is admittedly simplistic. It cannot be assumed that the person who is the recipient of the reward automatically matches what he has received. The recipient may neither expect the friendship to grow nor desire a higher level of friendship. He may see little relationship between what he has received and the growth of friendship. He may feel some tension in being given a larger amount than he has provided earlier. He may not be even motivated toward affiliation. He may fear rejection, or experience conflict con-

cerning the consequences of involvement and so may wish to actually avoid intimacy.

The kinds of variables implicit in these qualifying statements have been examined in research concerned with the development of a model of friendship formation (Heilbronn, 1975; Howitt, 1976; La Gaipa, 1977). Components of various theoretical models were simultaneously tested in order to assess the utility of different models and to identify the critical variables to be included in subsequent model building. Several findings of this research program are relevant here.

First of all, the strain toward the perception of equity in the exchange of rewards was considerable. However, generally low relationships were found between what one roommate reported giving and the other reported receiving, suggesting considerable distortion in the perception of rewards.

Secondly, the best predictor of the growth of friendship was an index tapping overreward in the exchange of rewards, i.e., the more a person reported giving as compared to the amount received, the higher the level of friendship.

Thirdly, the role of individual differences in this model was negligible. Some self-report personality measures such as self-concept and dogmatism, generated statistically significant results. However, there was no gain found in the predictive power of the model by including self-report personality measures.

Objective of the Study

The first objective of this study is to assess the role

of n-affiliation variables in motivational models of expectancy and equity that have been found to be useful in explaining the growth of friendship. Individual differences will include personality factors as measured by the TAT.

The second objective is to explore dyadic patterns of interaction in terms of their consequences for the growth of friendship. Dyadic patterns of interaction include measures of similarity between roommates along such dimensions of n-affiliation, Equity, Expectancy, and Distortion. In addition, sex differences will be examined.

The third objective of this study is to assess the validity of a new scoring method for tapping affiliation by means of the TAT. The scoring system will include measures of n-affiliation, f-affiliation, and c-affiliation.

The Role of Individual Differences

There is considerable support in the psychological literature for the general proposition that how one thinks about and behaves in interpersonal interactions is rooted, in part, in emotional factors, indices of which can be the degree of self-acceptance, the extent of underlying fears of rejection, involvement, dependence or abandonment. Research by Wood and La Gaipa (1978) offers some support for this view. Socially withdrawn children were found to differ from socially accepted children in what they considered to be important qualities in friendship and in terms of their fantasy productions using a TAT-type test.

In view of the limited support obtained for self-report

measures, a different approach is suggested, i.e., the use of projective measures. The essential notion here is that the affiliation motive is likely to make an impact on the processes of social exchange involved in friendship formation. The TAT fantasy productions may provide some clues as to the evaluation of rewards given and received and the consequences of such exchanges on the development of friendship.

Dynamics of Overreward

Balance theory and Equity theory both represent a cognitive consistency approach in postulating that imbalance is an unpleasant state, and that people are motivated to reduce tension. Newcomb's (1961) balance theory postulates that in the exchange of interpersonal rewards, people strive toward balance, and that such balance is critical in the maintenance and stability of interpersonal relations. Consistent with balance theory is the idea that if a person finds that he is giving more than he is receiving, the disparity creates tension and attempts will be made to reduce the overreward to the level of the amount of reward being received. Equity theory (Adams, 1965) similarly emphasizes attempts to reduce tension, although granting that one of the six ways to respond to overreward is to increase input to match the level received. Adams views such overreward as a tension-reducing strategy rather than as a strategy to change the nature of an interpersonal relationship. Both of these cognitive consistency theories are

useful in explaining the continuation or termination of a relationship, but not the growth of a relationship. Growth cannot be explained adequately by equilibrium notions (La Gaipa, 1977).

Blau (1967) offers a somewhat different perspective. Blau, as a sociologist, is less interested in tension than in the emergent qualities of social exchange, namely its impact on the growth of interpersonal relationships. Blau is more interested in the why of social exchange, i.e., the effects of social exchange that motivate people to participate in the "giving" and "receiving". Insofar as different levels of friendship are associated with differences in the quality and quantity of rewards, it is not enough simply to reciprocate. A casual acquaintance with someone may be balanced but unsatisfying.

Blau suggests that overreward is a possibly useful behavioral strategy to force the other party to reciprocate at a higher level than previously. Imbalance is deliberately induced to maintain feelings of obligation at high rates of exchange. Blau would agree that tension is an element underlying the need to reciprocate, but notes that the major motivational force is the desire to increase the friendship rather than the reduction of tension. The notion of tension, then, is not critical to Blau's theory of overreward.

A psychodynamic interpretation. Most of the theoretical approaches described above say very little about the role of individual differences. It would be an oversimplification to

say that most people who overreward are motivated by the desire to increase the level of friendship or that there is a conscious motivation to do so. The underlying motivations are as yet unclear. It is not known, for example, whether overreward is used mainly as an approach or an avoidance mechanism or some combination of the two.

Let us consider some possible conjectures. The over-rewarder may be motivated by an unconscious, deep-rooted fear of abandonment or rejection rather than by a more consciously acceptable need to enter into close, satisfying relationships with others. Perhaps a strong affiliative drive in such individuals may be as much a consequence of anxiety associated with rejection as pleasure associated with interpersonal satisfaction. As for underrewarders, individuals who characteristically contribute less than they receive may be withdrawing from the over-zealous attempts by the other to establish a relationship. It is not uncommon for persons who have been rewarded too generously to be suspicious about the other's ulterior motives. Moreover, in some people such cognitions may, in turn, arouse fears about the consequences of involvement. The underrewarder's defensive style, in contrast to that of the overrewarder, may cause him to invest even less of himself in the relationship as time goes on and to withdraw from interactions with the other.

A further possibility is that overrewarders differ from underrewarders in the ratio of the need for affiliation to the fear of rejection. Perhaps, for the overrewarders,

n-affiliation exceeds f-affiliation, whereas for the underrewarder, the f-affiliation exceeds the strength of his affiliative drive. In terms of Miller's (1948) theory of displacement, differences in the relative strength of approach and avoidance result in differences in the strength of displaced projective responses. This suggests, then, that overrewarders and underrewarders may be differentiated on the basis of their displacement patterns on the TAT.

Need for Affiliation and Interpersonal Attraction

Research using TAT measures of n-affiliation to study affiliative behavior have produced somewhat conflicting results. The linearity of the relationship between n-affiliation and indices of attraction has been questioned. Pelletier (1976) found a positive relationship between affiliative needs and affiliative behavior for females. Other researchers suggest that people with high n-affiliation scores are more likely to be rejected by their peers than those having low affiliation scores. Individuals scoring high on n-affiliation were less often judged by their peers to be intimate friends (Groesbeck, 1958). They were seen as more anxious than low scorers about the possibility of being rated as more unpopular (Byrne, 1961), and were, in fact, rated as more unpopular (Atkinson et al., 1954; Zuckerbrod, 1976).

Some attempts have been made to specify the conditions mediating the relationships between n-affiliation and affiliation indices. The role of sex differences and the use of

expectancy measures have helped to improve the kinds of predictions made. . . Zuckerbrod (1976) found that high n-affiliation was associated with low popularity for males, but not for females. In addition, he found no relationship between n-affiliation and expectations of acceptance from others for either sex. Fishman (1966), whose study was restricted to females, found that n-affiliation was positively associated with affiliation-type behavior for persons high in expectancies. For persons with low expectations, however, n-affiliation was not significantly related to observed behavior involving affiliative acts. Sherwood (1966) concluded sex differences are an important component of affiliation motivation research.

It should be noted that both Zuckerbrod (1976) and Fishman (1966) included several indices of n-affiliation. Zuckerbrod found that n-affiliation was positively associated with n-affiliation conflict, an index derived from Atkinson's scoring system. The same correlations were obtained with the conflict measure as with the n-affiliation measure. On the other hand, Fishman used positive and negative measures of n-affiliation and obtained significant results only with positive n-affiliation measure.

What these studies on n-affiliation and affiliative behavior suggest is that further research should consider (1) the role of sex differences, (2) the inclusion of measures of expectancy, and (3) the application of improved measures of affiliative conflict.

Equity Theory, Need for Affiliation and Tension

The neglect of individual differences in Equity Theory has been noted (Adams, 1965; Walster et al., 1973). Moreover, as noted earlier, high need affiliators are rated as less popular and as more anxious than moderate or low need affiliators. Since the notion of tension is critical in Equity Theory, it would seem reasonable to look at the relevance of the tension variable for need affiliators within an equity framework.

First of all, it seems necessary to demonstrate that a relationship exists between n-affiliation and tension. The felt tension could be located either in the person high in n-affiliation, in the persons living with the high need affliator or both. In other words, it may be necessary to look at the relationship between n-affiliation and tension, as well as the tension reported by persons living with roommates high in n-affiliation.

Secondly, it is important to determine if the role of tension in Equity Theory depends on such variables of individual differences as n-affiliation. Howitt (1976) did not find that the tension indices contributed significantly to the equity model being investigated. Focusing on individual differences may help to enhance the contribution made by the tension variable. Perhaps, tension is differentially experienced in an inequitable situation by individuals varying in their affiliative drive.

It should be noted that the general practice in research

on equity (Adams, 1965) is to postulate tension as an intervening variable. If the tension index in the suggested study does not contribute to the reliability of the predictions, this would tend to weaken the validity of Equity Theory.

Rationale for the New TAT Scales

As stated previously, one of the assumptions of the proposed research is that n-affiliation is a motive about which an individual may be in conflict. In order to assess the impact and magnitude of this conflict upon the individual's psychological functioning, a method must be devised to assess both the approach and avoidance aspects of affiliative drive (Miller, 1948).

Although not intended to reveal the extent of conflict, Atkinson's (1958) scoring system provides a breakdown of affiliative tendencies into positive and negative components. This system, then, is one way of obtaining approach and avoidance measures.

However, this procedure has a number of inadequacies. First of all, since only the positive categories contribute to the strength of affiliation motivation, a great deal of information regarding the fears people may attach to affiliative interactions is lost. Often the fears or concerns that people express concerning the dissolution of a relationship provides important clinical evidence of the value individuals place on affiliative relationships. Atkinson (1958), himself, is willing to concede the point in his statement that "the affiliative concern of one of the characters may be apparent

in his reaction to a separation or some disruption of an interpersonal relationship" (p. 207). However, these reactions, i.e., "feeling sad", or "grieved", are scored, according to his scheme, as instances of Negative Affective State, (G-), and as such, do not contribute to the n-affiliation score, that is to say, to the strength of the positive affiliative approach tendency.

The second objection is related to the first. The assumption underlying Atkinson's scoring system is that the algebraic sum of the affiliative categories can provide a measure of need strength. However, it cannot be assumed that an individual who expressed statements pertinent to five different categories has a more intense or a stronger drive toward affiliation than someone who expresses statements pertinent to only two categories. Drive strength, then, would be a function of story length. Also, identical scores for two subjects on need strength summed across protocols can result from different configurations of scores. What is needed is a system of content-analysis based on differential intensities of responses. An example taken from the preliminary sample may help to clarify the distinction.

Example: A depressed boy, somebody's son. The boy is contemplating suicide. The boy's father is a business executive who is never around. His mother is a loose woman who is having an affair. The boy feels he isn't loved. The boy wants to be loved. The boy will kill himself. (Card 3BM)

According to Atkinson's system, this story would be scored in this way: (1) "A depressed boy....feels he isn't loved" would be scored Negative Affective State, (G-). (2) "The boy is contemplating suicide" would be scored Negative Anticipatory Goal State (Ga-). (3) "The boy's father is a business executive who is never around" would be scored as Environmental Obstacle, (Bw), inasmuch as the statement implies actual physical, in addition to emotional, separation or isolation. (4) Affiliation Imagery, (Aff Im), would be scored because there is minimal evidence of affiliation. (5) "The boy wants to be loved" is scored Stated Need for Affiliation (N).

The categories that contribute a positive score to the strength of affiliation motivation are (N), (Aff Im), and (Bw), (although in a more clinically-oriented interpretation (Bw) would not contribute a positive score). The overall strength of n-affiliation as judged by this protocol is +3. Because the maximum possible score in any story is +7, a score of +3 would indicate only average strength.

Using the proposed system, based on an assessment of the intensity with which affiliative concern are expressed, this particular protocol would be assigned a value of 5, the maximum score for intensity of affiliative need. There is very clear and explicit evidence that there is an intense reaction to loss of love (Level 5). - "A depressed young boy....contemplating suicide....feels he isn't loved". The new system features weighted scores arranged in a hierarchy

of values; that is to say, increasing values are attributed to increasing levels of intensity.

The above rationale is presented in order to highlight the necessity of developing a more sensitive instrument for the purposes of this study.³ The proposed research is not meant to be a comparative study of the two scoring procedures. The superiority of the new, proposed system over that of Atkinson's cannot be demonstrated within the present framework. Such a demonstration would be beyond the scope of this study.

Predictions

Longitudinal studies (Howitt, 1976; Heilbronn, 1975) have attempted to identify some of the variables that should be included in a model of friendship formation (cf. La Gaipa, 1977). Figure 1 presents the variables found to have predictive power. A major task of the first objective, then, is (1) to determine if n-affiliation makes a significant contribution to the model; (2) to specify the location(s) of n-affiliation in this model, and (3) to assess the nature of the relationship, i.e., is n-affiliation an antecedent or mediating variable, and are the relationships between n-affiliation and other variables linear or non-linear.

The three affiliation scores to be used are n-affiliation, f-affiliation, and c-affiliation. All three TAT indices will be employed in regard to each of the following questions. The one believed to be most useful is specified in each instance. The questions given below should be regarded as data-sensitizing

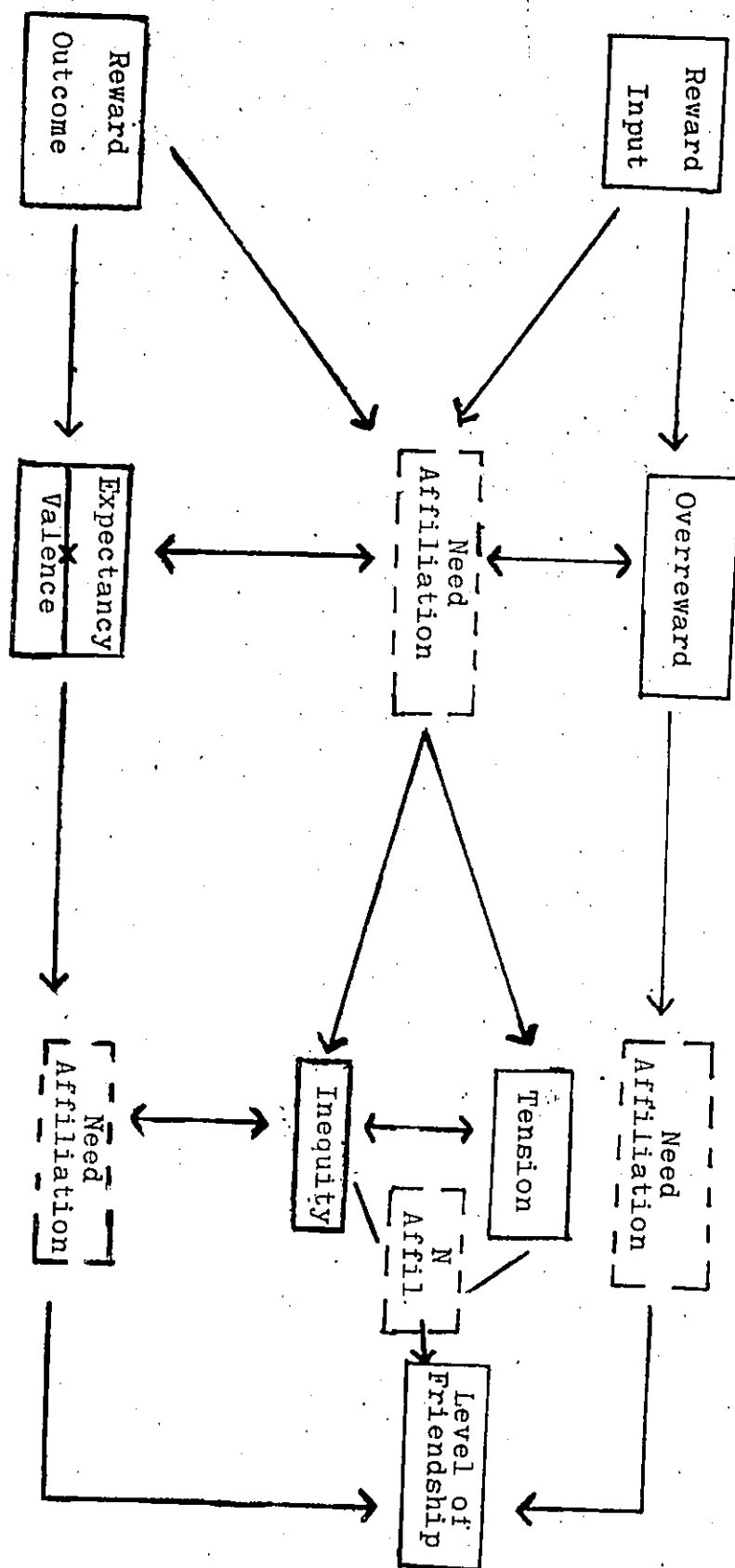


Figure 1. The model of friendship formation.

questions, and are not to be considered as complete.

Expectancy model predictions. To recapitulate, Blau (1967) has identified the strategy of overrewarding as one that motivates another to respond in like fashion, thus facilitating the growth of friendship. Atkinson (1954) proposed n-affiliation as a measure of individual differences regarding strength of motivation. N-affiliation, then, may be involved in overrewarding.

Some of the questions that could be raised using overreward as the dependent variable are as follows:

- (1) Is n-affiliation related to overreward?
- (2) Is the effect of n-affiliation on overreward mediated by tension?
- (3) Is the effect of n-affiliation on overreward mediated by Instrumental Expectancy.

Additional questions using Level of Friendship and Perceived Inequity as dependent variables are given below.

- (4) Is the effect of expectancy and valence on the level of friendship mediated by n-affiliation?
- (5) Is the effect of overreward on level of friendship mediated by tension?
- (6) Is the effect of overreward on perceived inequity mediated by n-affiliation?

Equity theory predictions. Two major premises of Equity Theory (Adams, 1965) that have received little attention relate to the role of individual differences in the perception of equity and distortion as a method for coping with inequity.

It seems reasonable to make the assumption that the accuracy of social perception is related to arousal and/or conflict states of the organism. Hence, the kinds of questions that can be raised are as follows:

As compared to subjects low in conflict affiliation, are subjects high in conflict more likely,

- (7) to perceive themselves as overrewarding others?
 - (8) to perceive themselves as involved in equitable rather than inequitable relationships?
 - (9) to experience more tension in inequitable relationships?
 - (10) to distort the level of rewards given and received from others?
- 49

CHAPTER II

METHOD

Introduction

The present study draws, in part, on data collected by Howitt (1976), now on tape in the Computer Centre.

Subjects

A total of 446 male and female students enrolled at the University of Windsor participated in the original study by Howitt (1976). Out of the 446 subjects that participated in the initial phase of testing, 350 continued on through the other phases during the academic year. This final sample consisted of 176 males and 174 females. It should be noted that not all subjects participated in the administration of the TAT measure.

Administration

Howitt approached students living in double rooms in the University dormitories to solicit their co-operation in a study on roommate compatibility. The only restriction imposed on the selection of subjects were that roommates should not have known each other prior to the study and that both members were willing to participate.

The first administration of test material took place between October 15, 1973 and November 1, 1973. Groups of from five to fifteen students assembled in dorm meeting rooms

were given the Roommate Compatibility Questionnaire to fill out.

The second administration took place in January, 1974. Howitt administered (again in groups) the friendship questionnaire, a dogmatism scale, an ascription of responsibility scale and the California Personality Inventory. These measures were analyzed in Howitt's dissertation. The TAT was also administered at this time, but Howitt did not analyze the protocols.

Instruments

The La Gaipa Friendship Inventory (Fl). The following seven friendship dimensions are measured by the 35 item Fl:

Similarity. Perceived similar personality characteristics, attitudes and opinions.

Self-Disclosure. Perceived willingness to communicate inner, private feelings or information of a rather personal nature.

Authenticity. Perceived behavior that is characterized by openness, and genuineness without any facade or hidden motives.

Helping and Support. Perceived psychological or moral support in terms of concern for another's welfare.

Empathic Understanding. Perceived ability to comprehend another person's feelings; willingness to consider another's point of view.

Positive Regard. Perceived value and respect in terms of willingness to show praise, appreciation, approval and

adequacy.

Strength of Character. Perceived impersonal rather than intrinsic values of others, focusing upon character, achievement, and social responsibility.

The following measures of the above seven friendship dimensions were obtained and analyzed in the present study.

Reward Input. (Amount of each dimension given). The subjects were requested to indicate on seven point scales the frequency with which they contributed each of the rewards implicit in the 35 items. The rating scale ranged from never (1) to sometimes (4) to always (7). A factor score was derived from the sum of the amount of reward contributed on the seven friendship scales.

Reward Outcome. (Amount of reward received). The subjects were requested to indicate on seven point scales the frequency with which they received the rewards implicit in each of the 35 items. A factor score was similarly derived as for reward input.

Tension:Affect. A factor score was derived from a factor analysis of semantic differential scales in which the subjects were asked to describe their feelings with regard to their specific roommate. The factor contains items with high loadings on the following scales: Good-Bad; Contented-Discontented; Pleasant-Unpleasant; Friendly-Unfriendly; Trusting-Skeptical.

Perceived equity of the friendship dimensions. The subjects were requested to indicate on a nine point rating

scale: (1) fairness of friend (comparison of amount given versus amount received); (2) reward equity (amount received compared to what other friends receive relative to what was given; and (3) fairness in terms of a comparison of friend with other friends. Parts 1 and 3 were rated from very unfair (1) to very fair (9). Part 2 was rated from much less (1) to much more (4).

Expectancies

Perceived instrumentality. The subjects were requested to indicate on nine point rating scales the probability that each of the friendship dimensions would lead to an increase in friendship.

Expectancy of increase in friendship. The subjects were requested to indicate on a single item nine point rating scale the likelihood that the friendship would increase by the end of the school year.

Valence

Desire to increase friendship. The subjects were asked to indicate the degree to which they would like the friendship to increase by the end of the school year.

Friendship Indicators

Different measures of level of friendship were employed. Which criterion is "best" depends, in part, on how predictable it is. The measures considered are listed below:

Friendship ladder - self. The subjects were instructed to indicate on a nine point friendship ladder the present level of friendship that has been established. This ladder

was described in terms of four levels of friendship:

Social Acquaintance; Good Friend; Close Friend; Best Friend.

Friendship Index. This is a factor score derived by means of a principle components analysis of the Friendship Ladder - self and ten mutual activities items. This index is based on the first of the two factors that emerged. The Friendship Index is based on the following items that have the highest loadings: (1) Friendship Ladder - Self; (2) Invited by roommate to his family home; (3) Engaged in prolonged discussions; and (4) Invited roommate to your family home.

Dyadic Indices

The data generated by this research are of two types: monadic and dyadic. The statistical relationship examined stem mainly from responses of the same individual, such as between his motive strength and his perception of inequity. By way of contrast, dyadic indices involve the combination of the responses of two individuals along such parameters as similarity in tension, affect, etc. Dyadic indices can potentially serve various functions, such as permitting the investigator to assess the role of distortion by comparing the "give" responses with the other's "receive" responses. Dyadic indices are seldom used because of various unsolved psychometric problems (cf. Heilbronn, 1975).

As a self-other attributional model of friendship, the subjects participating in the Howitt-Heilbronn longitudinal study, were instructed to describe both themselves and other on various dimensions. Each member of a dyad, then, rated

himself and the other member. With four ascriptions within a dyad on any given variable, it is possible to delineate six comparisons or schemata of congruence: self-self, other-other, two interpersonal self-other, and two intrapersonal self-other schemata. These schemata could be used to create various indices of similarity in Level of Friendship, Tension, Affect, and Trust. These indices relate to the level of intimacy achieved and to the quality of the relationship.

Individual Differences

TAT cards tapping affiliative concerns. The following is a description of the pictures used to elicit affiliative themes. They were presented in the order listed: (1) Woman standing with man behind her and to the side, (2) the heads of two young men facing each other in conversation, (3) man standing in the rain under a light (Card 20), (4) an older woman with a troubled look on her face looking away from a younger man (Card 6 BM), (5) six men seated about a table as in conference, and (6) a rear view of a boy reclining on floor with head on arm propped against a bench (Card 3 BM). Cards 3, 4, and 6 were part of Murray's traditional TAT series and cards 1, 2 and 5 were obtained from Dr. J.W. Atkinson, University of Michigan, Psychology Department, Ann Arbor, Michigan. Illustrations can be found in Appendix A.

Scale of intensity of need for affiliation. This scale was developed by the author from a preliminary analysis of 156 TAT protocols obtained from an undergraduate class in

Psychology, most of whom were engineering students.

Numbers in the extreme left represent the value associated with the intensity with which an affiliative theme was expressed. Each story will receive only one such value.

5: Extremely strong. Reference is made to an intense love relationship or to an intense, elaborated reaction to loss of love. There is expressed within a story intense rivalry for a person's love or intense reaction to betrayal by close friend or lover. There may be intense guilt over harm to close friend or lover.

Examples: (a) They are having an affair. They are lovers. (b) Lovers dressing after sex...She wants to marry him... (c) He is crying because he didn't have enough guts to shoot himself. His parents never understood him and he never had any real friends. (d) The bridegroom found out the girl is seeing the best man. (e) Depressed boy contemplating suicide... because he isn't loved. The boy wants to be loved. (f) Young boy crying because he lost his best friend ...breaks up with the girl so he and his best friend can be friends again. His friend takes the girl out. They eventually get married. (g) Young boy contemplating suicide. He just shot a friend in an argument. He's not sure of anything. (h) A lone suicidal alcoholic...His wife has left him...He wants to escape the pains of reality.

4. Moderately strong. Reference is made to strong need for companionship, to turmoil because of loneliness, to strong reaction to loss of love. There is a description of a stressful relationship occurring despite affection.

Examples: (a) Mother is upset because he's going to big city...She wants him to stay and keep her company ...He wants to stay because he loves his mother. (b) A lonely man, being miserable and lonely waiting waiting for someone...It must be important, because he is still waiting, standing in the rain. (c) Little boy crying over mother who has died. He loved his mother dearly...He'll accept the fact that he no longer

has a compassionate and understanding mother to take care of him. (d) Child crying, beaten by his father. [Father frustrated in his need to take care of his family, for whom he cares a great deal.]

3. Medium strength. There is description of stress or crisis in a relationship, but without much indication of emotional involvement. Characters seem detached or aloof or there are qualified descriptions suggesting detachment.

Examples: (a) Husband and wife seem to have had an argument...neither seems to be very happy with the outcome of the argument. She seems to be leaving. (b) They're talking about their marriage [in light of assumed infidelity.] Wife caught her husband at dinner with his secretary. [The affair is made innocuous.] (c) Members...want a good time...party in Toronto. (d) She wants a divorce, [in light of infidelity, but there are no emotional elaborations or implications.] (e) Husband and wife are having a quarrel, [but problems not elucidated.]

2. Marginal Strength. Affiliation is not the central theme; other motives, such as power, achievement or dominance are in focus. The affiliation motive must be clearly present, however.

Examples: (a) [Competition between two males for a girlfriend, where attention is placed on struggle for dominance.] They might duke it out, have a physical outburst. [Lover is on the periphery, and no passionate claim is made.] [Having designs on the same woman.] (b) Policeman investigating a murder falls in love with the suspect. [Reference to "falling in love" where it is coincidental to the plot.] (c) Businessmen having lunch together [as a result of a successful business venture.]

1. Absent. Evidence for other motive, such as sex, without any indication of an affiliative motive. Tensions experienced are not related, or not clearly related, to affiliation. Affiliation is unimportant and very incidental to an important central theme. Dependency, autonomy or

aggression is the focus rather than affiliation.

Examples: (a) They both want sex, not a lasting relationship. (b) Contemplating suicide, life has gone to shambles. [The problem is not clearly related to affiliation.] (c) Wife and husband are arguing. She wants husband to quit smoking. [While the argument has certain consequences for the relationship] Wife will stop talking to her husband, [it is not clear whether her wish to have him stop is rooted in concern for his health.] (d) Son wants to leave home, mother wants him to stay. [It is not clear whether this is a need for dependency or affiliation.] (e) Son arguing with father over use of car. [This has more to do with drive toward autonomy on the son's part, even if he needs the car for a "date".] (f) Bring shame on the family name...Being rejected for it. [This has more to do with maintaining social status, dominance than affiliation.] (g) This boy is thinking about home...Wonders why he is at foster home...The court doesn't know who the boy should live with yet. [The boy is concerned with who will take care him, with whom he can rely on and not specifically with emotions accompanying the break-up of his parents' marriage.] [This is a dependency not an affiliation need.] (h) Son has quit college and eloped. [Although it may appear that the son has chosen an affiliative-type goal (marriage) over an achievement-oriented goal (college), an interpretation faithful to the "spirit" of story is that the son was motivated by the need to defy authority, convention in rejecting father's middle class values (going to college, church weddings).] (i) Mother and son...discussing death of the father...Constant quarrelling over will with brothers and sisters...Want peace in the family. [Desire for peace in the family is rooted in fears of retaliation from other family members in response to his aggressive and greedy act.] This young man will take over the operation of the ranch but fears trouble from both his brothers and sisters.

Scale of intensity of fear of affiliation. This scale was developed from the same set of protocols used to develop the Scale of Intensity of Need for Affiliation. As in the previous scale, the numbers on the extreme left represent the value associated with the intensity with which

affiliative fears were expressed. Each story will receive only one such value.

5. Extremely strong. Reference is made to murder, getting killed, suicide, contemplating suicide in connection with an affiliative theme.

Examples: (a) Jealous wife kills both of them. (b) He will therefore take the gun and use it on the people he hates the most. (c) The boy wants to be loved. The boy will kill himself. (d) The son goes back to crime [as a result of not receiving forgiveness from his mother] and gets killed by a policeman.

4. Moderately strong. Overt aggression resulting from rivalry; intense loneliness; betrayal or deception by friend or lover; intense disappointment, or intense hurt or anger. There is reference to a fear of emotional commitment.

Examples: (a) He thinks his wife has found out... She is being aloof... Had a quiet lunch filled with tension... If this is true the relationship will be discontinued... She no longer wants to invest any emotion into it. (b) She will eventually accept his death, but her life will never be the same without him. (c) Each waiting for the other to say something, to acknowledge that they will see each other again... They'll mumble goodbye to each other and go their separate ways. (d) This boy breaks up with the girl so he and his friend can be friends again. His friend takes the girl out. They eventually get married. (e) The person doesn't show up, man standing in the rain for a very long time and left with a very disappointed face. (f) He will get married and she will continue life unhappily. (g) He will leave angry and hurt; she will remain confused. (h) He will ache with the pain and the cold of his chosen and protracted aloneness... He will amble slowly, quietly out of the light's glare and into darkness.

3. Medium Strength. Reference is made to less intense loneliness and disappointment. There is reference to divorce, threats of divorce or to quarrels. There is

clear evidence of ambivalence in feelings or compromise in action.

Examples: (a) Son and girlfriend move in with the mother [to whom he has just voiced his decision to leave.] (b) Mother will understand son's feelings and give him her blessing, though she is not very happy. (c) If anything the woman will survive, even if alone (divorced). This in the long run might be the only type of solution. (d) They'll end up getting a divorce and remarrying each other in two years. (e) She might disown him. Some time in the future they will reunite. (f) He will stop crying and get up and probably forget the whole thing.

2. Marginal Strength. Slight indication of fear of negative consequences.

Example: Child anxiously awaiting the father's return, [but there is a margin of doubt as to whether his needs will be satisfied.] Father does return -- but late. Airplane had problems.

1. Absent. No indication of fear of negative consequences, predominantly positive affiliative themes.

The conflict index. Following the lead of an earlier study (Lesser, 1958), the conflict index will be defined as the ratio of the strength of affiliative need to the strength of anxiety about expressing affiliative needs. Thus, the ratio will be expressed in this way:

$$\text{c-affiliation} = \frac{\text{n-affiliation}}{\text{f-affiliation}}$$

Each subject has produced six stories in response to the six TAT cards presented. Each subject, therefore, will be assigned six scores representing the intensity of n-affiliation and six scores representing the intensity of f-affiliation. In order to calculate the conflict index,

the investigator has summed across the six n-affiliation scores and the six f-affiliation scores to generate two overall scores representing the strength of affiliative need and affiliative fear respectively. These values will then be substituted into the above formula.

CHAPTER III

RESULTS

Inter-rater Reliability

The TAT pictures were independently rated by the present investigator and a former graduate student of psychology. Intensive training sessions were held prior to the rating sessions. Each party established proficiency in the use of the coding system. Discussions were held on the underlying rationale for assigning a particular score to a protocol. The actual ratings were conducted after it was apparent that considerable consensus had been established.

A sample of 39 subjects were randomly selected for the assessment of the reliability of the ratings. Each of the six stories was assigned a rating in terms of n-affiliation and f-affiliation. The reliability of the c-affiliation scores were not established since such scores are composite scores of n-aff and f-aff. A total score on each dimension was obtained by adding the scores on each protocol. Product moment correlations were computed between the ratings of the two raters.

An r of .86 ($p < .01$) was calculated for n-affiliation, and an r of .83 ($p < .01$) was calculated for f-affiliation. These correlations are quite high, and indicate that the ratings are highly reliable.

Analyses of Data

The present study generated two broad types of data: monadic and dyadic. Dyadic data represent those scores calculated as the average value of or difference between a pair of scores contributed by specific roommate pairs. Monadic data represent those scores contributed by individuals irrespective of their membership in a dyad. The first section of this chapter will deal with monadic data.

Correlational analyses were conducted to locate significant relationships among the variables and the nature of the relationships. Product moment correlations (zero order) were computed in order to assess where relationships exist. Partial correlations were then computed to determine the effects of affiliation measures on the friendship indices were direct or indirect.

Table 1 presents the correlational matrix generated by the interaction of the three affiliation measures and the various friendship variables. The n-affiliation and f-affiliation scores were the sum total of the affiliation intensity values assigned to each of the six TAT stories. The c-affiliation score for each individual was calculated by summing the six ratio scores of n-affiliation to f-affiliation to yield an overall conflict ratio per subject. This conflict index ranges from a value of 1.2 to 30. The degree of conflict decreases with increasing values. A score of six represents maximal conflict with respect to affiliative drive and a score of 30 denotes minimal or non-existent

conflict.

Several of the findings presented in Table 1 are worthy of note. The correlations between the three affiliation scales attained statistical significance, ($p < .01$).

Table 1 reveals that the tendency to Overreward was significantly correlated with the extent of underlying conflict about affiliation, ($r = .102$, $t(310) = 1.79$, one-tailed test, $p < .05$). C-affiliation was also significantly correlated with a person's motivation to engage in friendship type behavior with his roommate, ($r = .144$, $t(310) = 2.56$, $p < .01$). In other words, the lower the conflict, the more motivated was the roommate in providing rewards for his partner. The conflict measure also yielded a significant correlation of $.123$; $t(310) = 2.19$, $p < .05$, with the perceived degree of Equity in interpersonal transactions (not in Table). That is to say, the higher the intensity of affiliative conflict, the less equitable the perceived distribution of interpersonal rewards. Equity is defined as a comparative outcome of what the roommate received compared to Other. The extent of c-affiliation was also significantly correlated with Instrumental Expectancy, $r = .143$, $t(310) = 2.55$, $p < .01$ (not in Table), Friendship Index, $r = .134$, $t(310) = 2.38$, $p < .01$, and general Expectancy, $r = .135$, $t(310) = 2.40$, $p < .01$. The greater the degree of conflict about affiliation, the less likely was the expectation that engaging in certain friendship behaviors would lead to an increase in the level of friendship. In addition, conflict

was significantly related to generalized Expectancy measured by a single item scale. Persons with increasing intensities of conflict also tended to report having achieved less intimate friendships. Consistent with this observation is the finding that conflicted individuals tended to experience greater emotional dissatisfaction with the friendships they achieved ($r = -.135$, $t(310) = 2.40$, $p < .01$).

Fewer relationships attained significance when f-affiliation was correlated with the friendship dimensions. Persons identified as having a high degree of f-affiliation reported experiencing significantly higher levels of Tension in their relationship with their roommate ($r = .150$, $t(310) = 3.00$, $p < .01$) and reported receiving higher levels of friendship regards ($r = .103$, $t(310) = 1.82$, $p < .05$).

Table 1 also reveals the relationship between n-affiliation and the various friendship dimensions. It is evident that positive affiliative drive correlated significantly with Overreward, Own effort, Expectancy, Reward Input, Reward Outcome, and Tension. These correlations indicate that persons having strong affiliative drive tend to over reward in social interactions, have higher expectations about the course of the friendship, and are more highly motivated in providing friendship benefits than persons of low affiliative drive. In addition, they indicate that high positive drive is associated with individuals who tend to make greater personal investments in a friendship, who tend to report having derived greater benefits from their friendships, and who,

TABLE 1
Correlations among TAT Affiliation
Measures and other Friendship Variables

Friendship Variables	TAT Affiliation Measures		
	n-affiliation	f-affiliation	c-affiliation
f-affiliation	.579**	1.000	
c-affiliation	.375**	-.452**	1.000
Overreward	.105*	.032	.102*
Own Effort	.146**	.044	.144**
Level of Friendship	.028	.013	.057
Valence	.052	-.026	.098
Expectancy	.103	.003	.135**
Friendship Index	.070	.008	.134**
Reward Input	.146**	.093	.087
Reward Outcome	.130**	.103*	.045
Affect	-.036	.049	-.135**
Tension	.117*	.150**	-.052

* $p < .05$

** $p < .01$

surprisingly, tend to report experiencing higher levels of Tension within their relationships.

A few sex differences were found (not reported in Table) in which a correlation was significant for the males but not for the females. For the male sample only ($r = .152$, $p < .05$), the higher the c-affiliation, the greater the perceived inequity reported by roommates as compared to what other roommates were receiving. It was also noted that the higher the n-affiliation, the higher the perceived Tension for males ($r = .192$, $p < .01$), but not for females ($r = .034$, $p < .05$). Similarly, for c-affiliation, the higher the conflict, the higher the Tension for males ($r = .190$, $p < .01$), but not for females ($r = .10$, $p < .05$).

Partial correlations were run in order to assess whether the effects of the affiliation measures on the friendship indices were indirect. More specifically, they yield information regarding whether the affiliation measures mediated the relationship between the various friendship measures. Partial correlations deal with the residual relationship between two variables where the common influence of a third variable, has been removed. The partial correlation coefficient represents the correlation between the error of estimate in predicting the first variable from the intervening variable and the error of estimate in predicting the second variable from the intervening variable.

The impact of the intervening or mediating variable can be assessed by a comparison of the product-moment correlation

coefficient with the partial correlation coefficient where the intervening variable's effects have been eliminated. If this latter coefficient is significantly lower than the former, then the variable can be said to have a mediating effect. The amount of variance accounted for by the intervening variable can be calculated by obtaining the difference between the squared product-moment correlation of the two major variables that includes the influence of the intervening variable and the squared partial correlation that excludes it.

Table 2 presents a summary of the comparisons of the product-moment and partial correlations for the theoretical relationships derived from Expectancy Theory. Two separate analyses between Valence and Level of Friendship and Expectancy and Level of Friendship were run. Although highly significant correlations were obtained between Valence and Level of Friendship ($r = .533$, $t(310) = 11.09$, $p < .005$), and Expectancy and Level of Friendship ($r = .582$, $t(310) = 12.63$, $p < .005$), it is apparent that the influence of the intervening variable, i.e. n-affiliation, was minimal within these relationships. Less than one per cent of the variance was accounted for by the mediating variable.

Table 3 presents a summary of the relationships between Overreward and various friendship and personality variables after controlling by selected variables. The data reveals that although the correlation between Overreward and n-affiliation was significant ($r = .105$, $t(310) = 1.86$, $p < .05$),

TABLE 2
 Prediction of Level of Friendship
 after Controlling for Need Affiliation

Expectancy	Zero Order	Partial
Valence	.533**	.531**
Expectancy	.582**	.579**

** $p < .01$

the relationship was neither mediated by Tension nor Instrumental Expectancy. Tension did not mediate the significant relationship between Overreward and Level of Friendship ($r = .617$, $t(310) = 13.80$, $p < .01$). In addition n-affiliation effectively mediate the highly significant relationships between Overreward and Roommate Fairness ($r = .730$, $t(310) = 18.83$, $p < .01$), Overreward and Equity (Comparative Outcome), ($r = .748$, $t(310) = 19.85$, $p < .01$), and Overreward and Roommate Fairness (Generalized Other) ($r = .785$, $t(310) = 22.30$, $p < .01$). In all cases the effects of the intervening variables accounted for less than one per cent of the variance.

Sex Differences

Tables 4 and 5 give the breakdown by sex of the means and standard deviations for each of affiliation measures and the dependent measures employed in the dyadic analyses respectively. It is evident from Table 4 that females differed significantly from males on the intensities of n-affiliation ($t = 9.56$, $p < .01$), f-affiliation ($t = 2.00$, $p < .05$), and c-affiliation ($t = 12.53$, $p < .01$). Table 5 reveals that females differed significantly from males only on the dimension of Affect ($t = 1.65$, $p < .05$).

Dyadic Analyses

The dyadic data under investigation in the present study were generated in the Heilbronn (1975) and Howitt (1976) longitudinal study by instructing roommate pairs to describe both themselves and their partners on various dimensions of theoretical relevance to the study of friendship formation.

TABLE 3
 Prediction of Overreward after
 Controlling by Selected Variables

Predictor Variables	Zero Order			Partials
	Overreward	Tension	Instrumental Expectancy	n-affiliation
n-affiliation	.105*	.069	.01	
Level of Friendship	.617**	.596**		
Roommate Fairness	.730**			.726**
Equity (Comparative Outcome)	.748**			.750**
Roommate Fairness (Generalized Other)	.785**			.783**

* $p < .05$

** $p < .01$

TABLE 4
Sex Differences in TAT Affiliation Measures

Affiliation Measures	Females (N = 150)		Males (N = 162)		t Values
	Mean	SD	Mean	SD	
n-affiliation	19.55	3.38	15.63	3.77	9.56**
f-affiliation	15.59	4.71	14.56	4.29	2.00*
c-affiliation#	10.32	3.31	7.41	2.05	12.33**

High scores indicate low conflict

* $p < .05$

** $p < .01$

TABLE 5
Sex Differences in Dependent Measures

Dependent Measures	Females (N = 176)		Males (N = 174)		t Values
	Mean	SD	Mean	SD	
Level of Friendship	.07	1.07	-.07	.92	>.01
Trust	-.04	1.05	.04	.94	1.06
Affect	-.08	1.05	.08	.94	1.65*
Tension	.00	1.03	-.00	.97	.10

* $p < .05$

These pairs of ascriptions were then compared and their differences categorized along the parameter of similarity or congruence. Frequency distributions of these differences were then graphed. The dyads whose ranked differences occurred in the top 25% of the distribution were called 'high similarity' dyads, and those whose ranked differences occurred in the bottom 25% of the distribution were called 'low similarity' dyads. The remaining dyads whose ranked differences fell within the middle 50% of the distribution were called 'medium similarity' dyads. Among the dimensions considered along the parameter of similarity were the affiliation measures, Equity, Expectancy, Valence, Reward Input, Reward Outcome and Distortion. The dependent measures constituted the means of a pair of ascriptions on the dimensions of Level of Friendship, Tension, Trust and Affect. All dyadic data were analyzed by sex as had been suggested by prior affiliation research (Sherwood, 1966). Levels of Trust, Affect, and Tension are factor scores calculated as a result of factor analysis and are relatively independent measures.

Figures 2 through 13 present the relationship between dyadic similarity and the dependent measures. Each figure presents one of the dyadic similarities in terms of its effects on each of the four dependent measures, analyzed separately by sex. Examination of the subscripts "a" and "b" permits the location of significant differences between different levels of similarity, i.e., high, medium, and low.

If no subscripts are indicated, no differences exist.

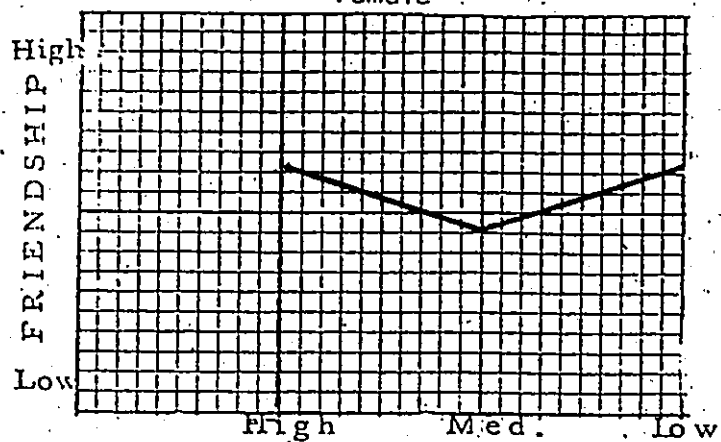
Also, similar subscripts indicate no difference. Different subscripts indicate a difference at the .05 level. Statistical differences are presented in more detail in Table 6 which contains specific F-values and levels of significance.

Figure 2 presents the relationship between similarity in n-affiliation and reported Level of Friendship, Trust, Affect, and Tension. The one significant finding involves males on the dimension of Tension. Male dyads whose members are similarly motivated toward affiliation appear to experience greater tension in their relationships than those males who are moderately similar or highly dissimilar in their affiliative drive.

Figure 3 reveals no systematic relationship between similarity in f-affiliation between roommate pairs and any of the dependent measures.

Figure 4 depicts several significant effects in the relationship between similarity in c-affiliation and the four dependent measures. Females rated as dissimilar with respect to c-affiliation evidently reported greater mean satisfaction with the relationship than either of the high or moderate similarity females. Males reported greater dissatisfaction in their affective relationships when they exhibited high and moderate similarity in affiliative conflict. Not surprisingly, males also reported attaining low levels of friendship when there was high similarity in c-affiliation.

Female



Male

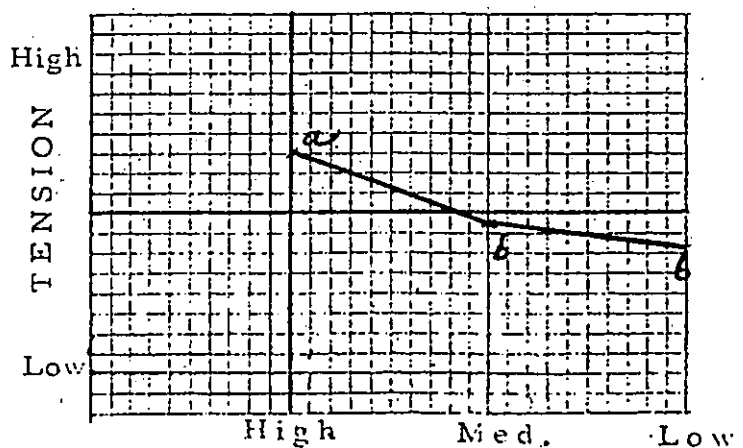
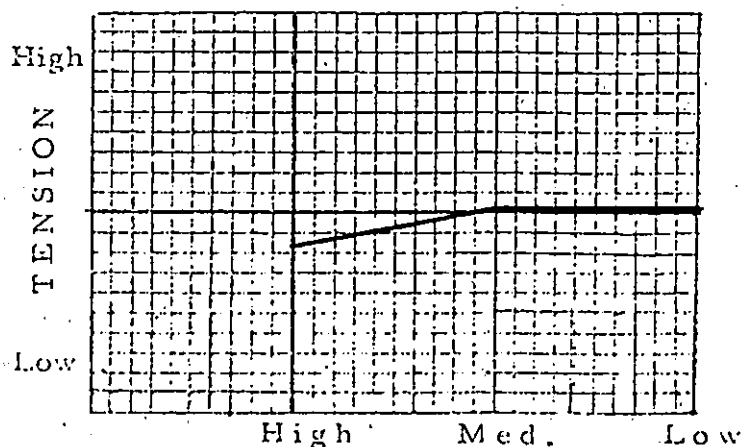
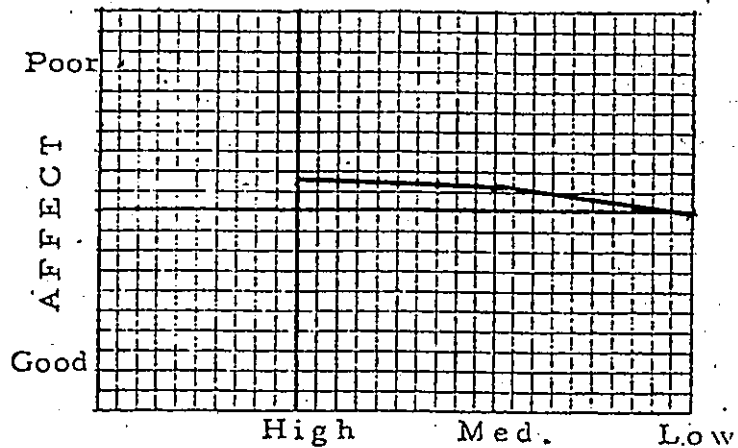
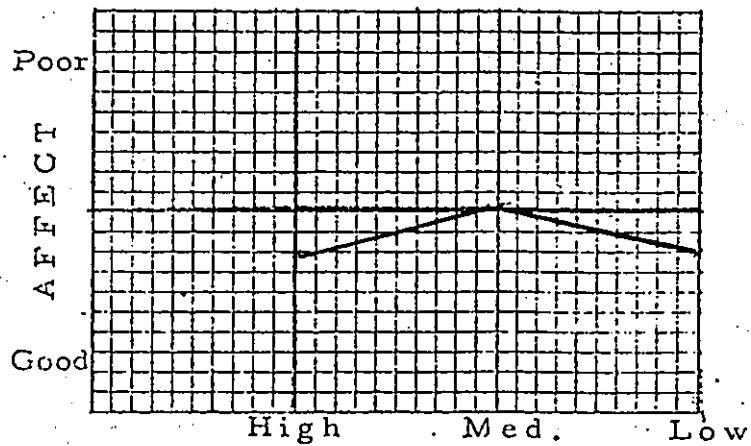
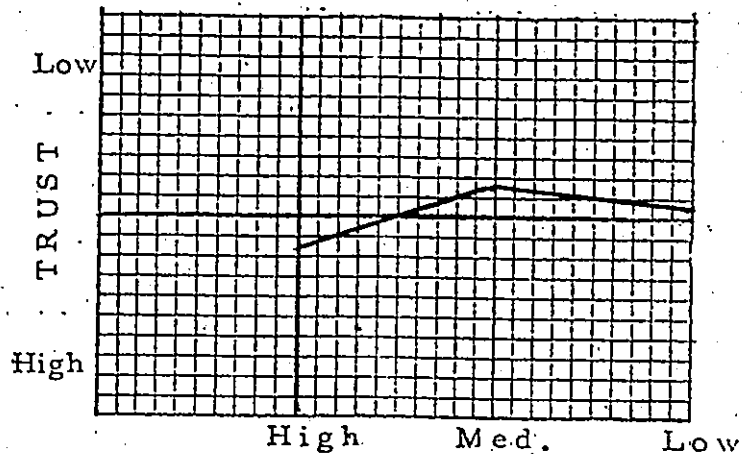
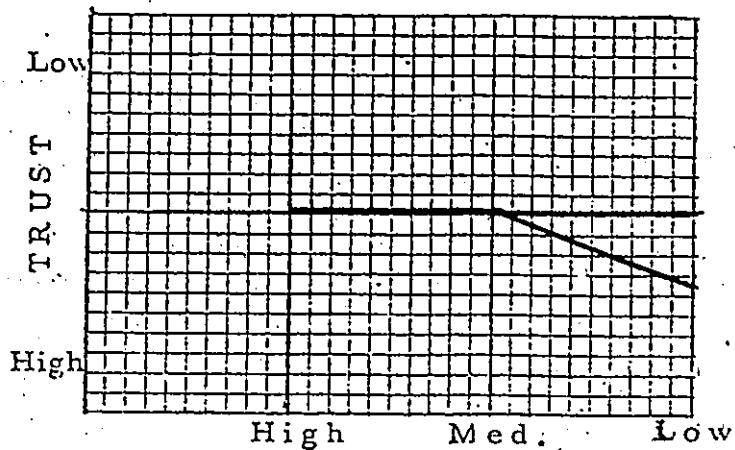
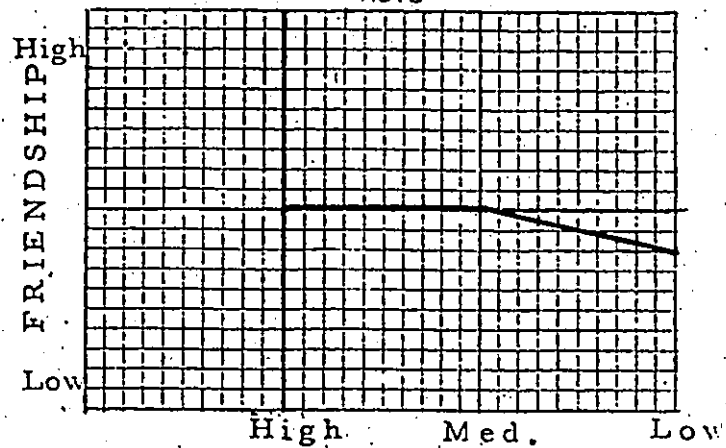
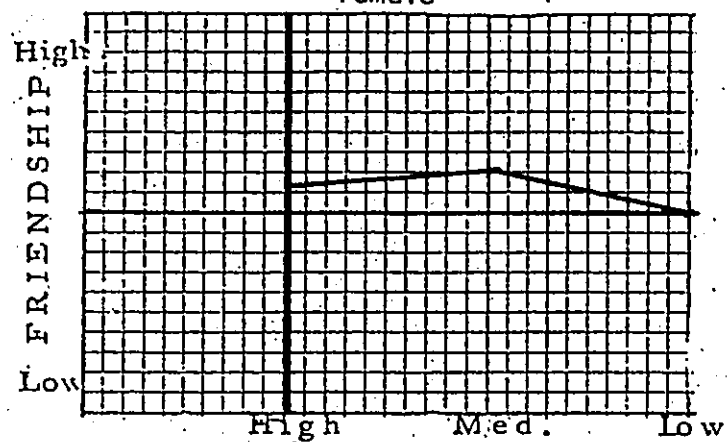


Figure 2. The effect of similarity in n-affiliation on the dependent measures.

Female



Male

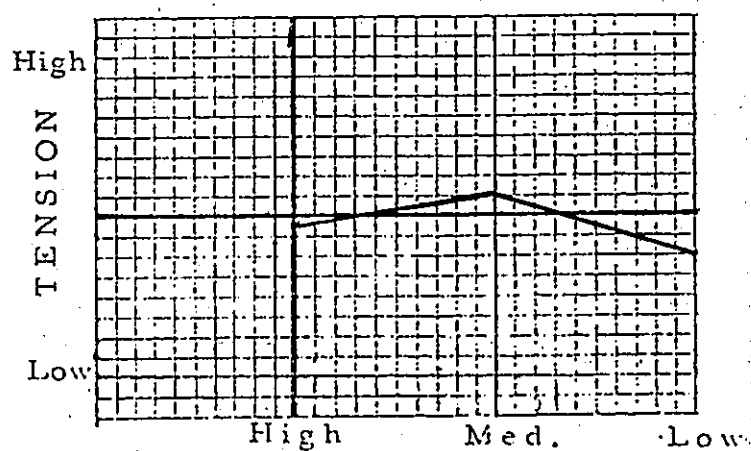
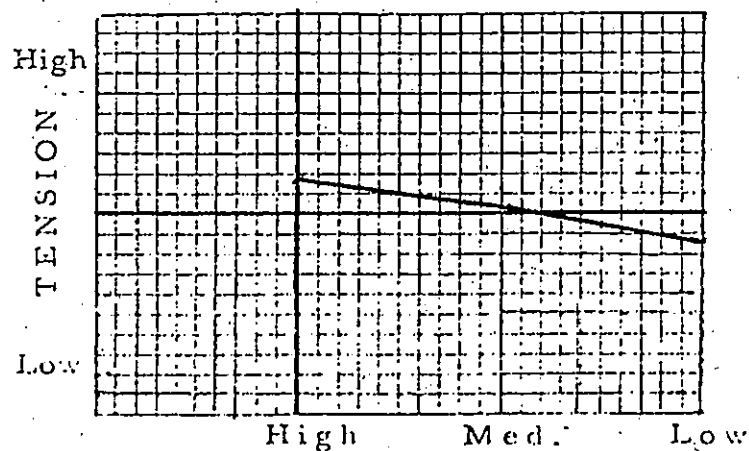
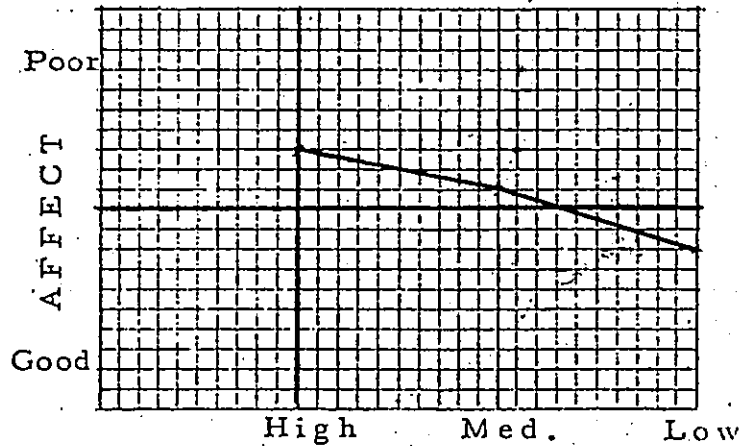
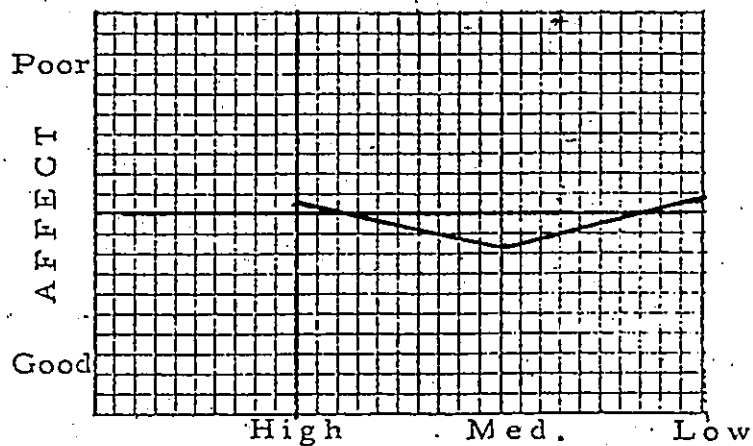
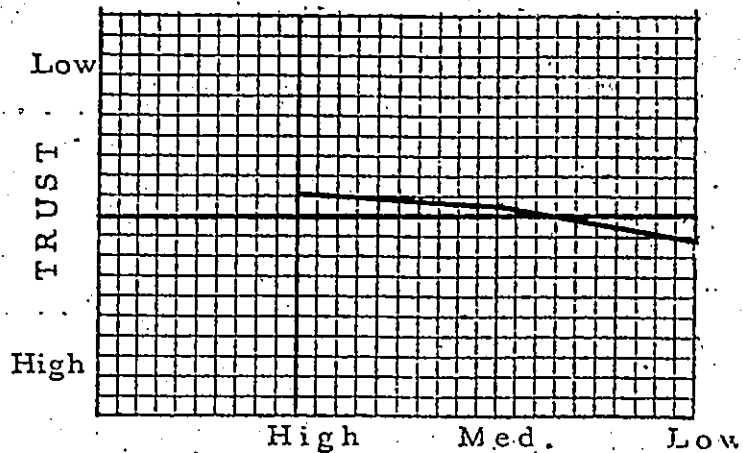
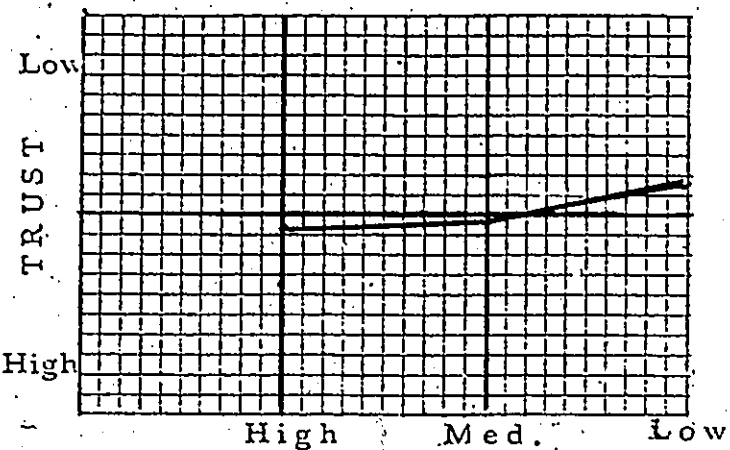
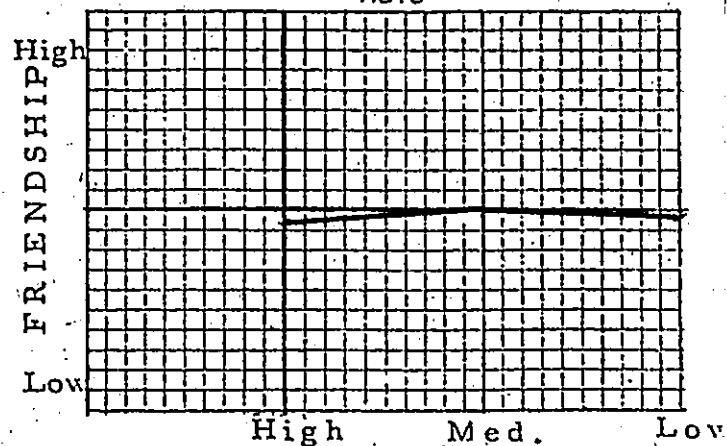


Figure 3. The effect of similarity in f-affiliation on the dependent measures.

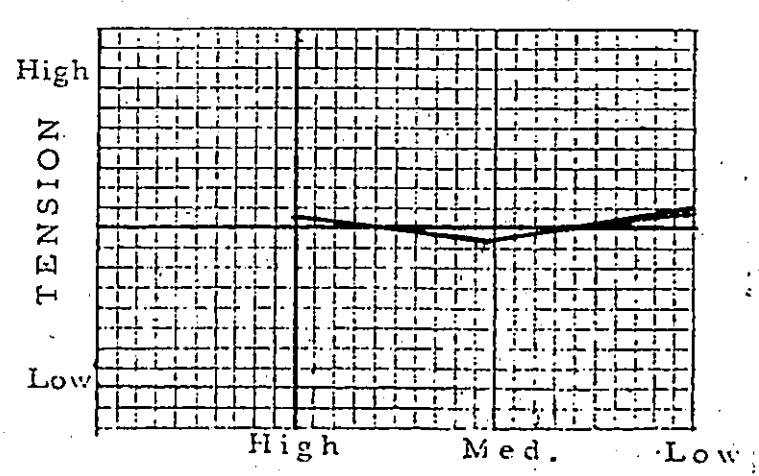
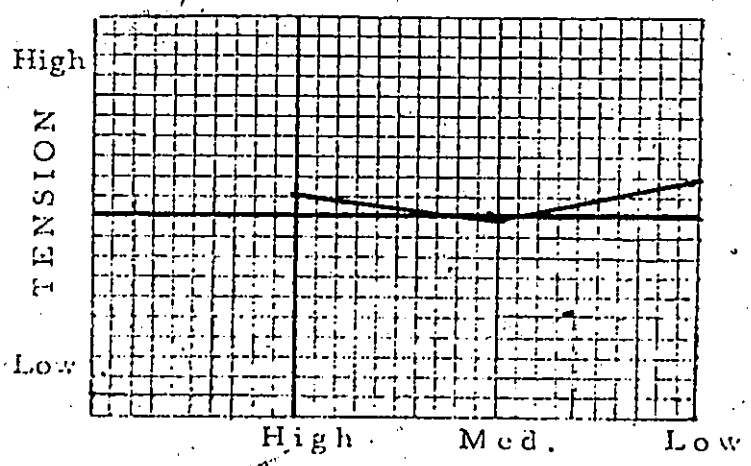
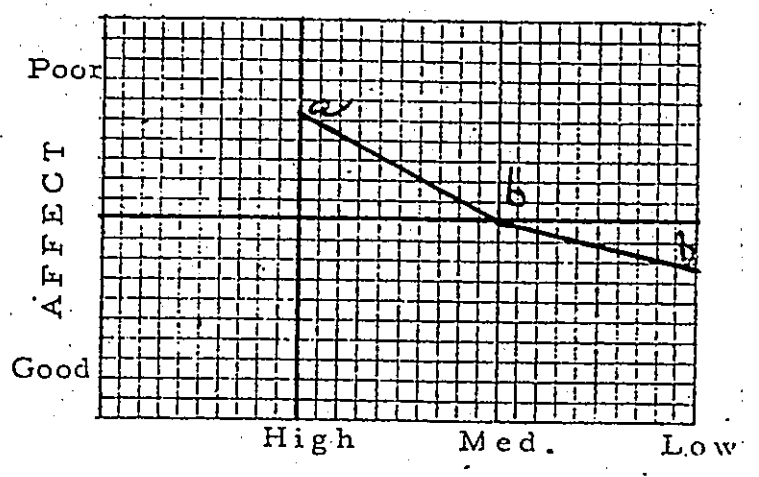
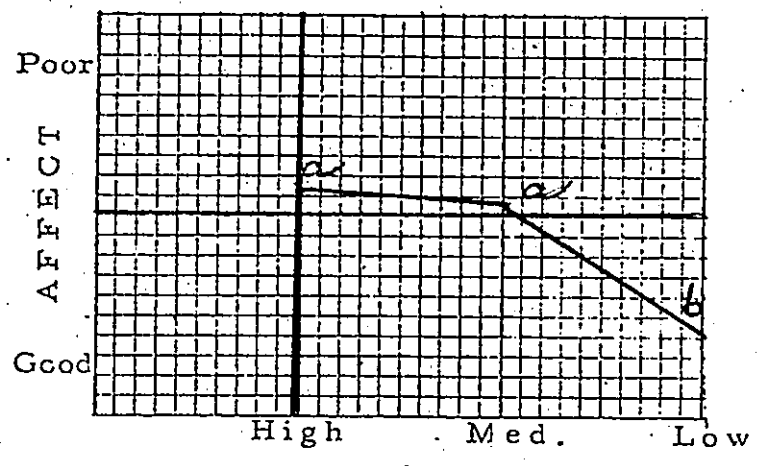
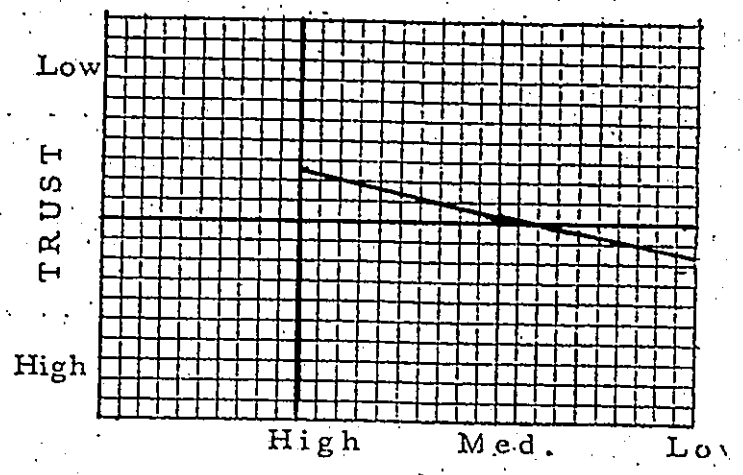
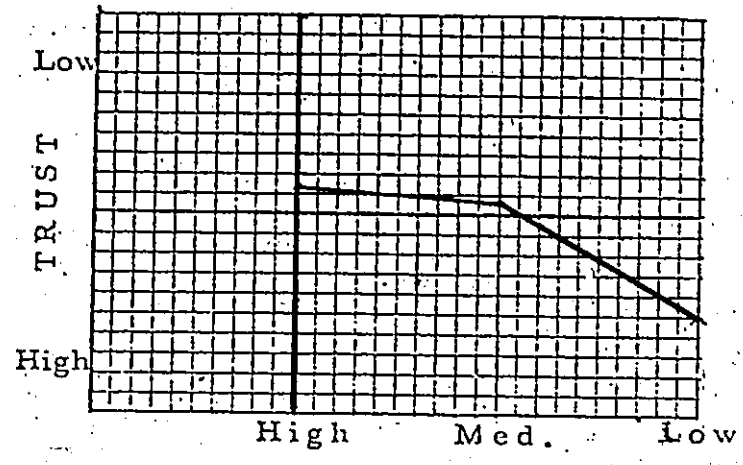
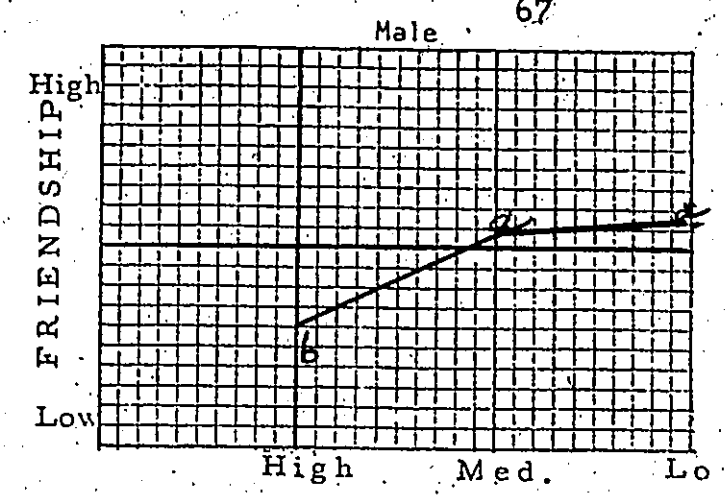
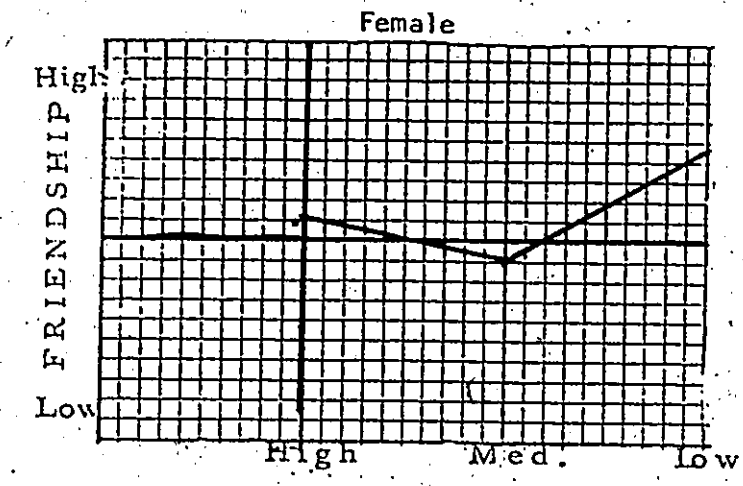


Figure 4. The effect of similarity in c-affiliation on the dependent measures.

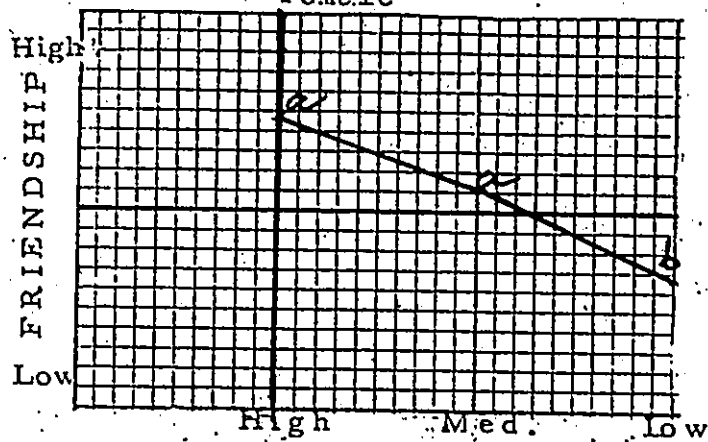
Figure 5 presents the effect of similarity in the Receive/Give Index on the dependent measures. Of significance here is the finding that females who agree closely in the rewards received relative to what they contributed report achieving higher levels of friendship than those females who do not agree as closely. Males who agree closely or moderately on the same dimension report achieving higher levels of Trust with their roommates.

Figure 6 shows the effects of Valence on the dependent measures. The only relationship which attained significance was that for male dyads highly similar and highly dissimilar in Valence, i.e., in their desire to increase the level of friendship (curvilinear relationship). These dyads reported experiencing lower levels of Tension when compared to males moderately similar in Valence.

The effects of similarity in judgments about Roommate Fairness on the dependent measures are depicted in Figure 7. Females whose judgments were congruous with respect to the amount they gave to their roommates relative to what they received from them, reported having achieved more intimate Levels of Friendship.

Figure 8 reveals the relationship between the effect of similarity in Equity judgments on the dependent measures. Equity is defined as the amount received compared to what other friends receive relative to what was given. As such, it is a more abstract measure of perceived Roommate Fairness than the independent variable in Figure 7. Results were

Female



Male

69

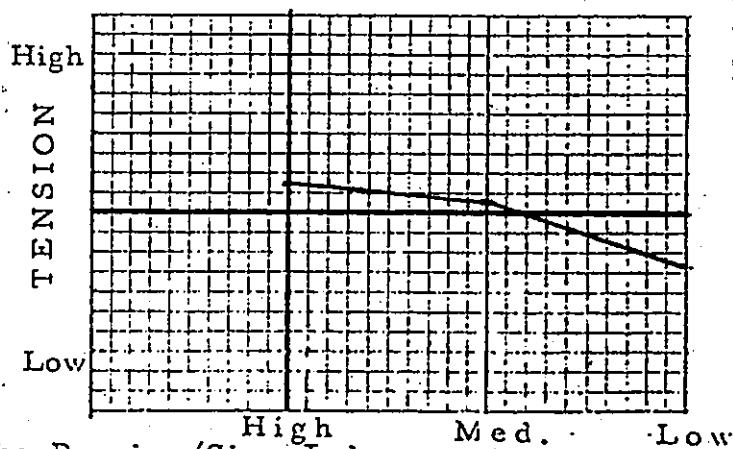
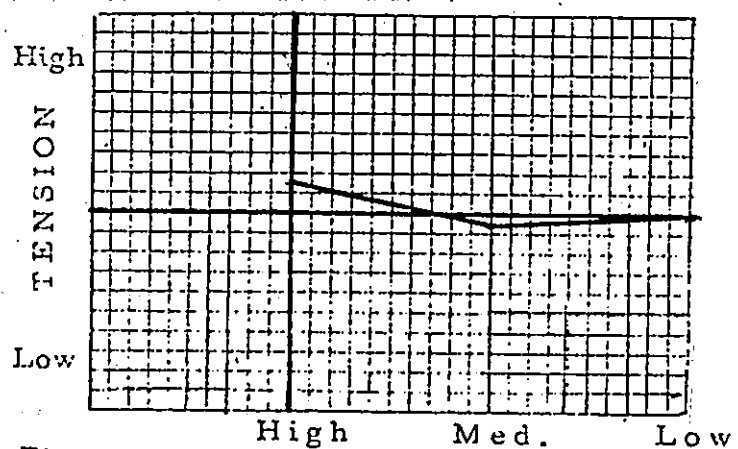
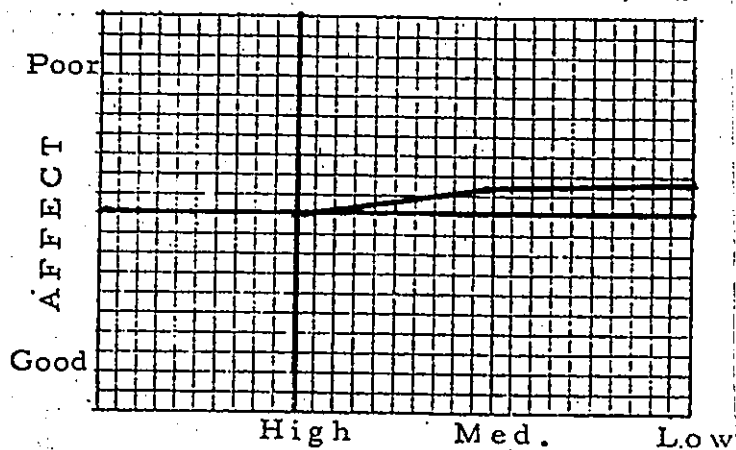
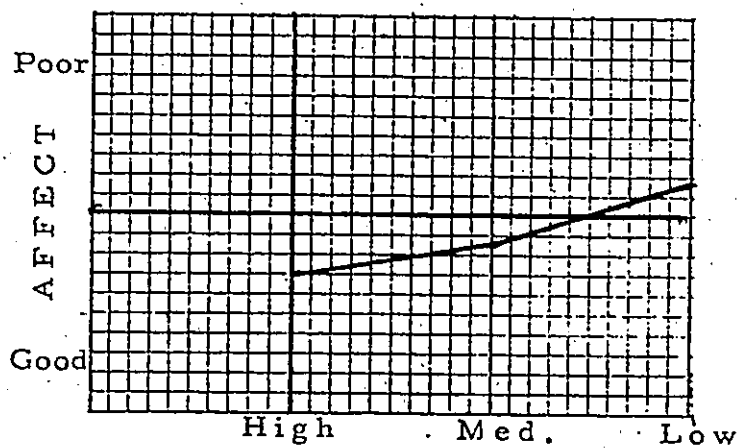
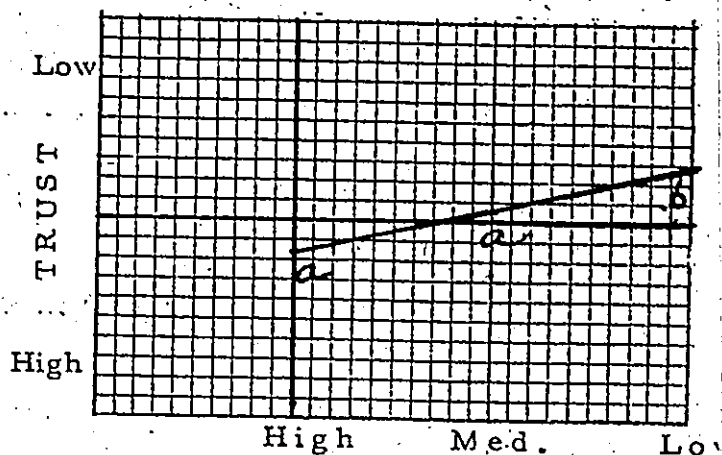
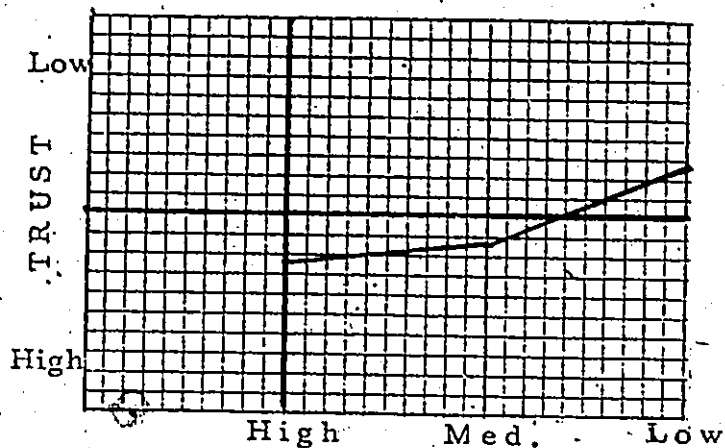
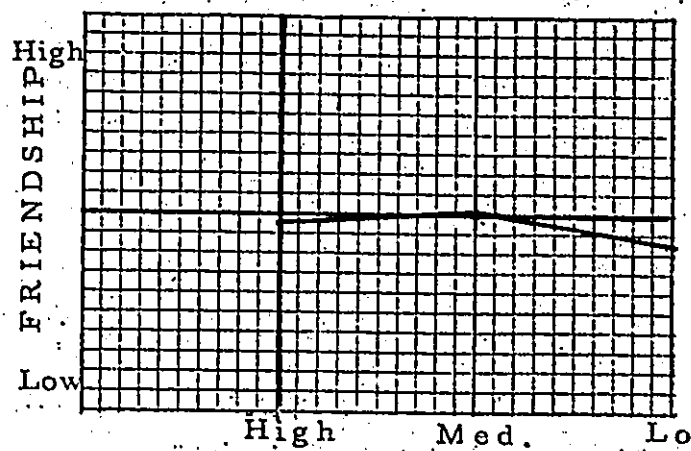
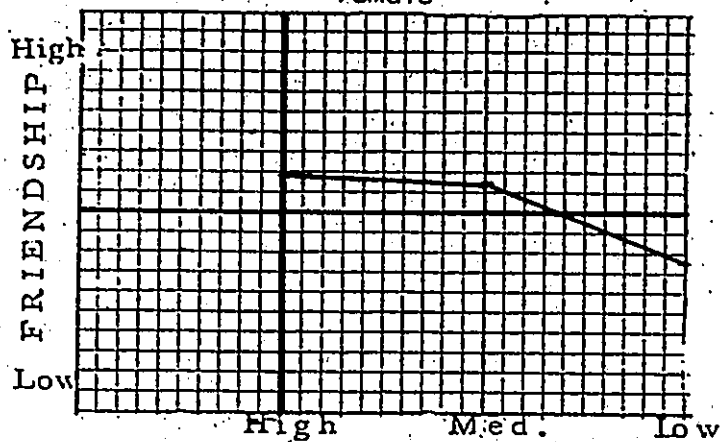


Figure 5. The effect of similarity in the Receive/Give Index on the dependent measures.

Female



Male

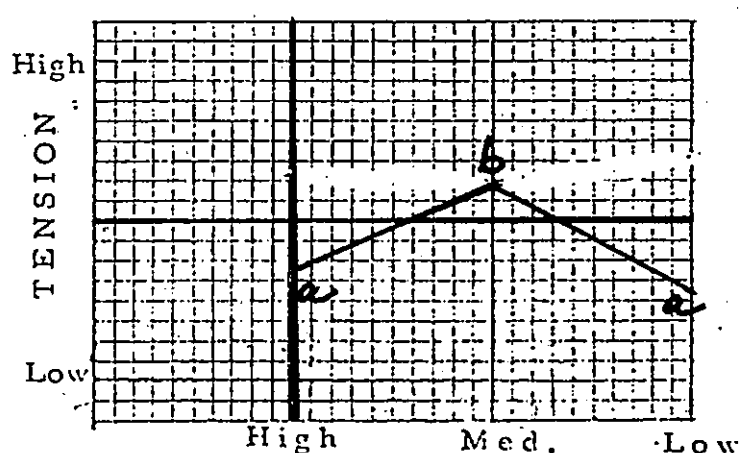
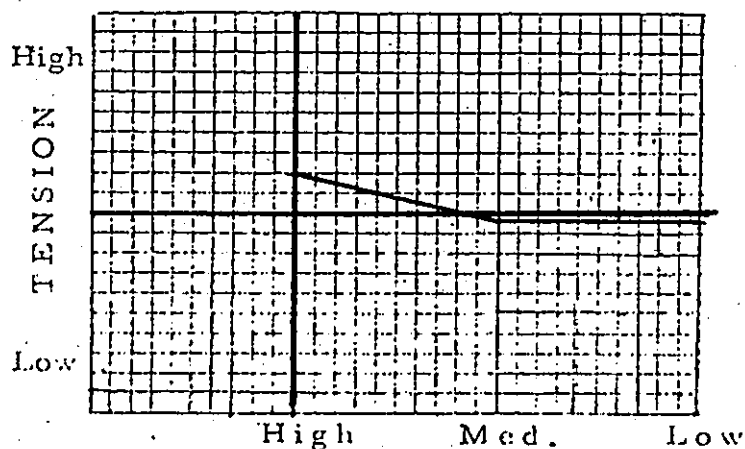
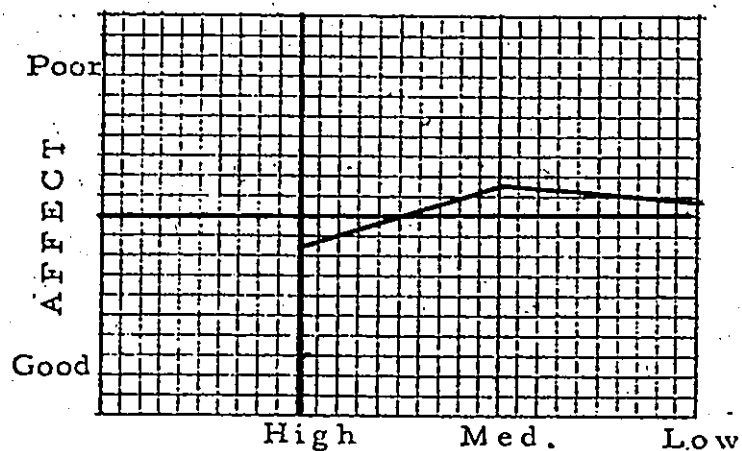
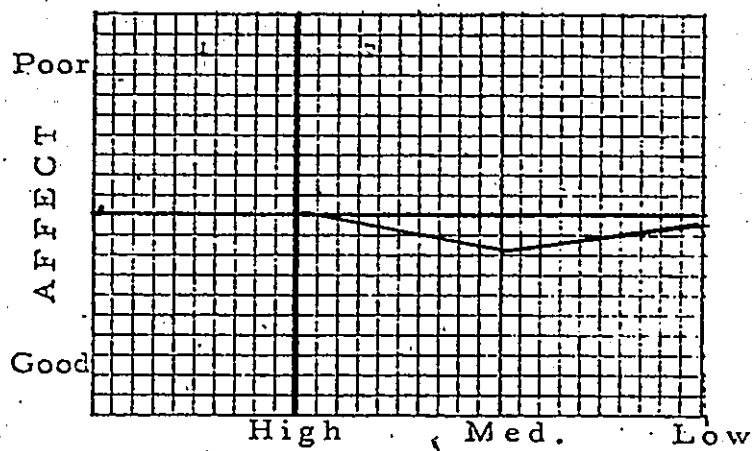
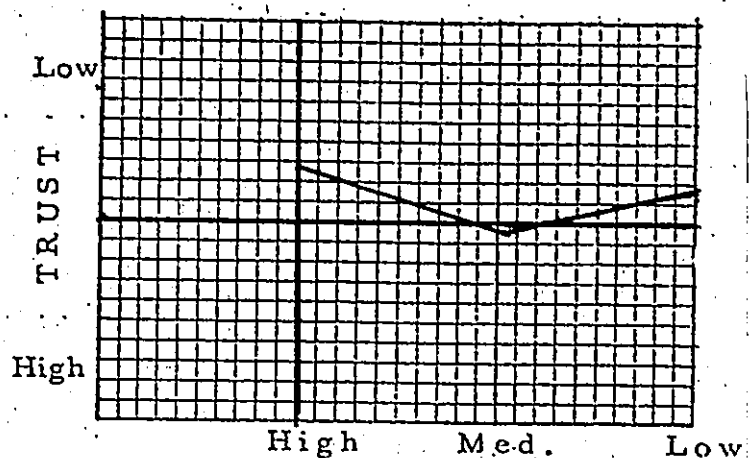
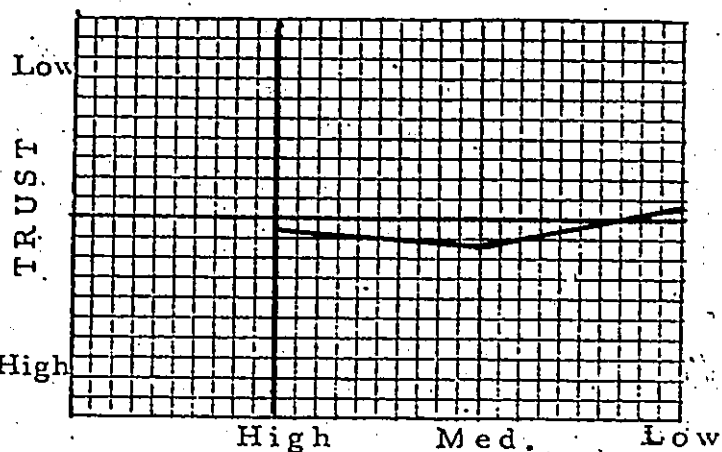
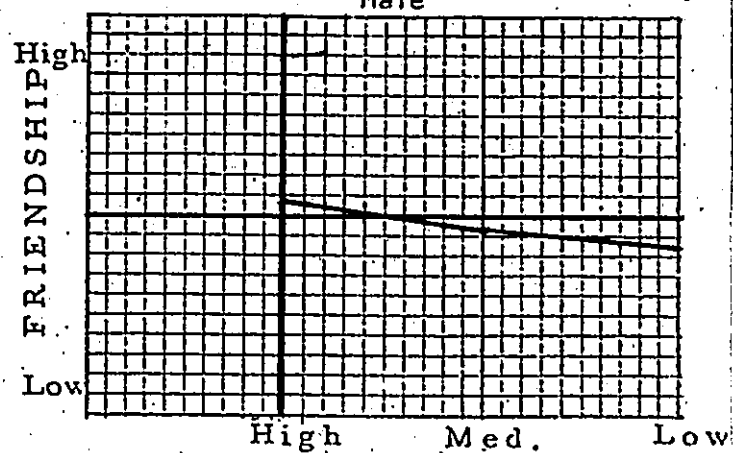


Figure 6. The effect of similarity in Valence on the dependent measures.

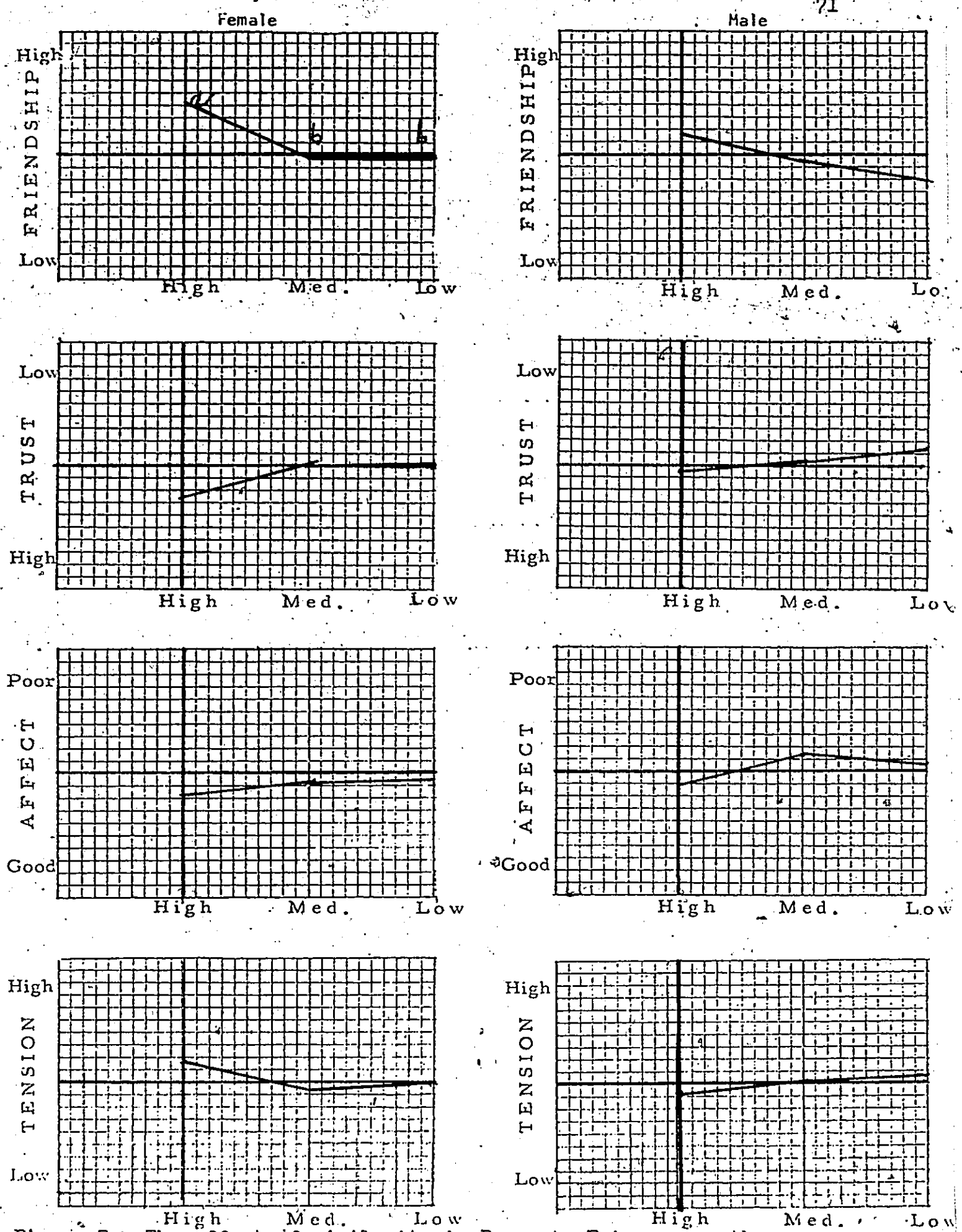


Figure 7. The effect of similarity in Roommate Fairness on the dependent measures.

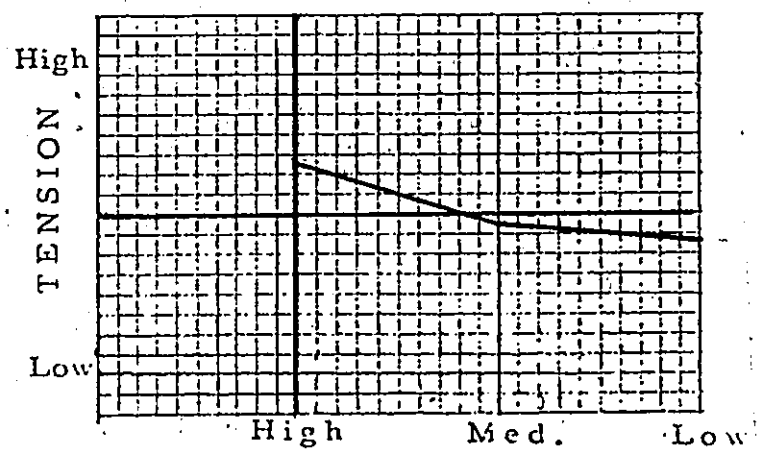
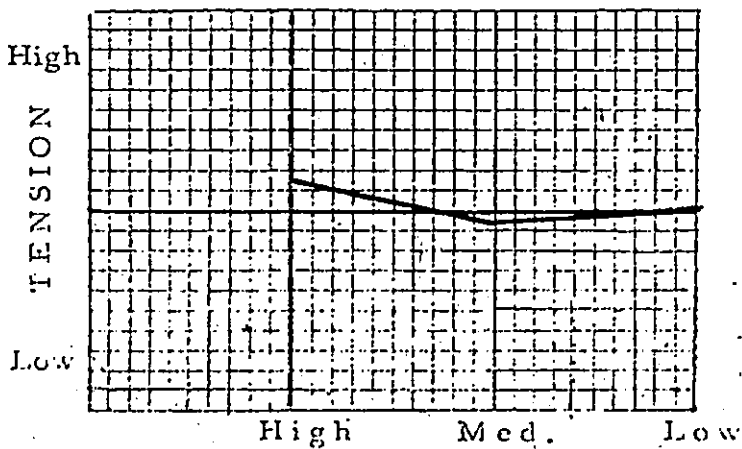
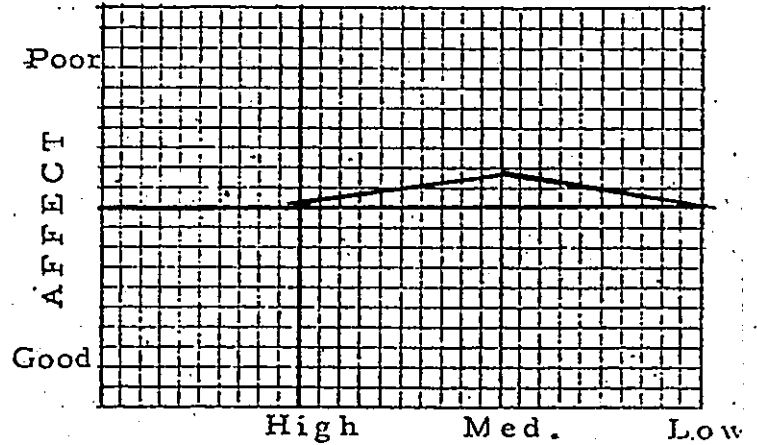
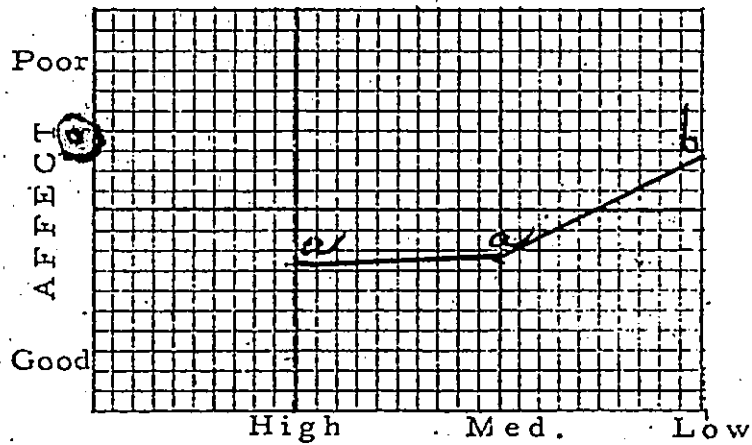
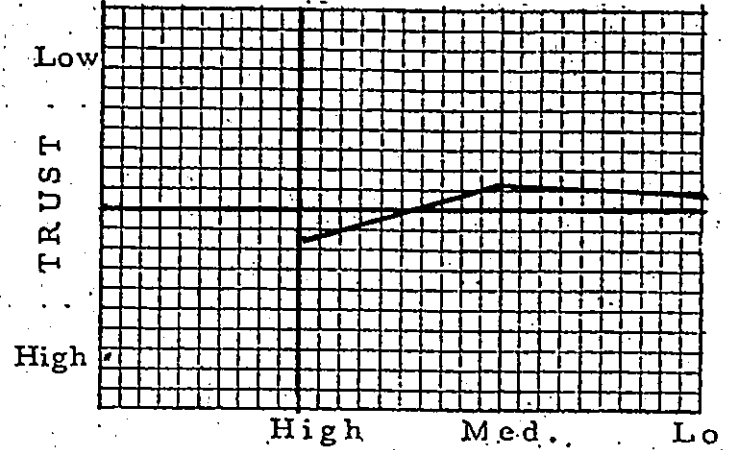
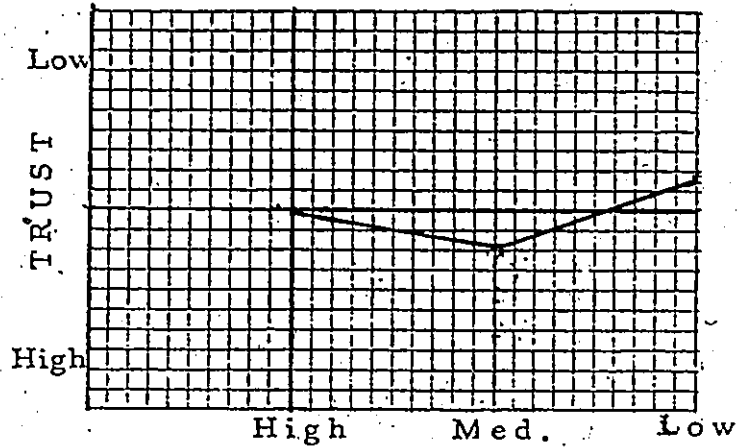
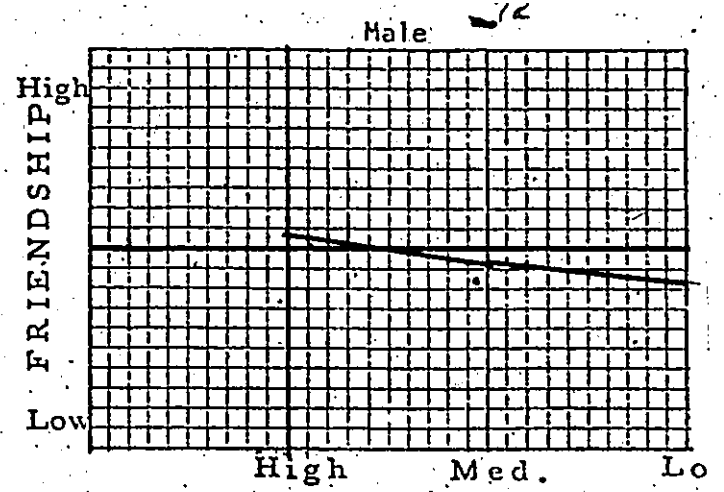
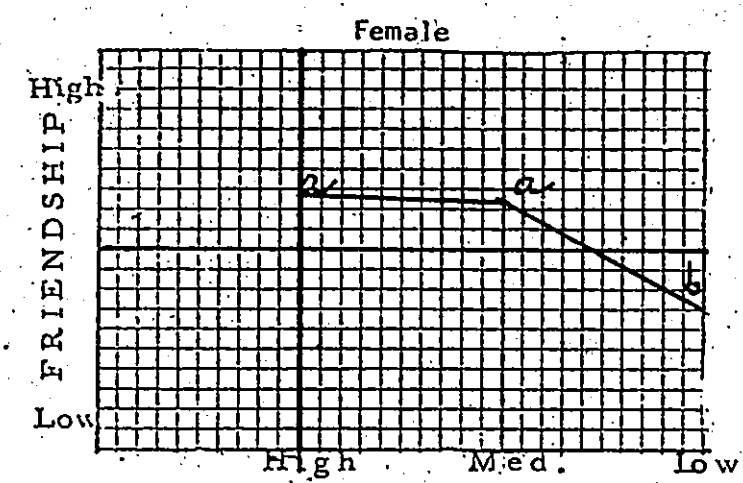


Figure 8. The effect of similarity in Equity on the dependent measures.

significant only for females. Low similarity in this Equity dimension in females was associated with poor Affect and less achieved intimacy in their friendships.

The effect of similarity in Instrumental Expectancy on the dependent measures is depicted in Figure 9. Instrumental Expectancy, according to Vroom (1964), the probability that supplying specific rewards will lead to valued outcomes, that is to say, to an increase in the level of friendship. Several relationships attained significance. For females, low and medium levels of similarity on this Expectancy measure were associated with lower Levels of Friendship, and lower levels of reported Tension. When similarity on this dimension was high, females reported higher levels of Trust and Affect, i.e., satisfaction with their relationships. For males, this variable had less predictive power. Male dyads who disagreed considerably on whether specific friendship acts would lead to an escalation in the Level of Friendship reported having attained less intimate friendships and having experienced more dissatisfaction with their relationships, i.e., poorer Affect, than those who more closely agree.

Figure 10 shows the relationship between the Friendship Index and the dependent measures. The Friendship Index is a factor score combining Level of Friendship and ten mutual activities. The results were significant for males only. Males highly similar and highly dissimilar on this dimension reported greater satisfaction with the relationship than

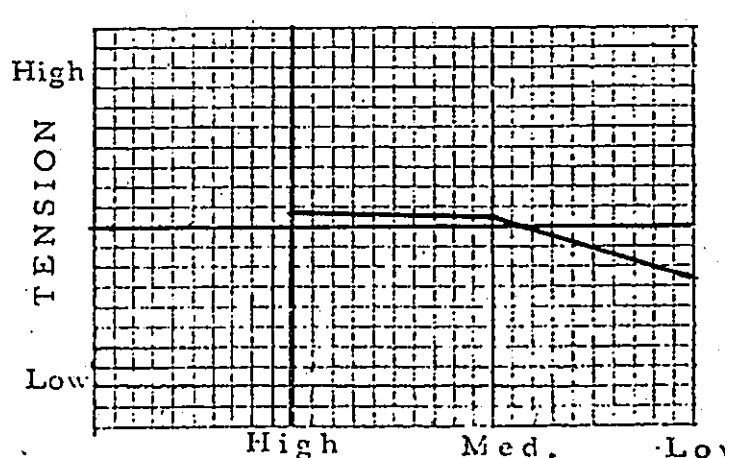
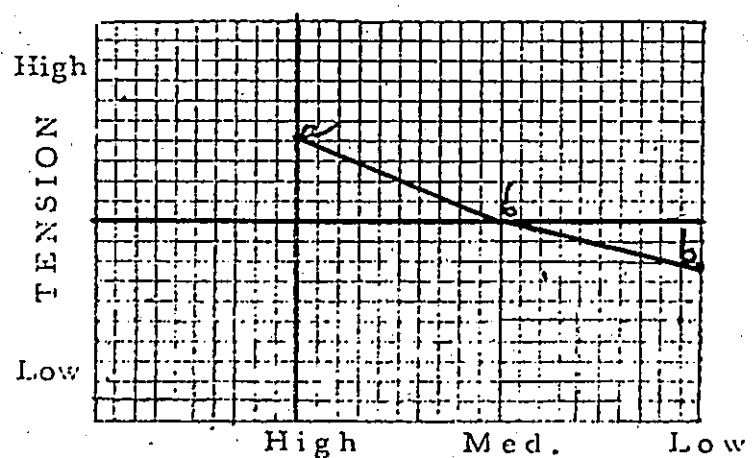
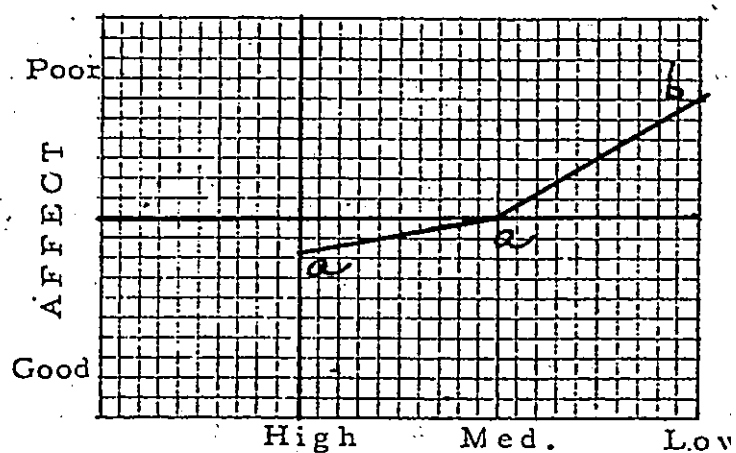
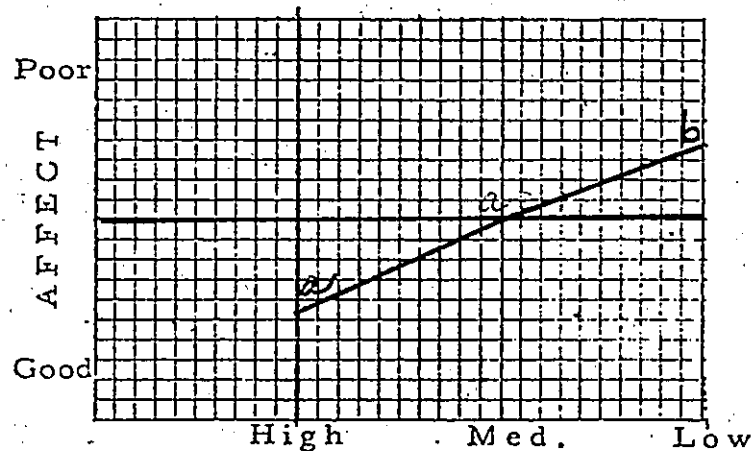
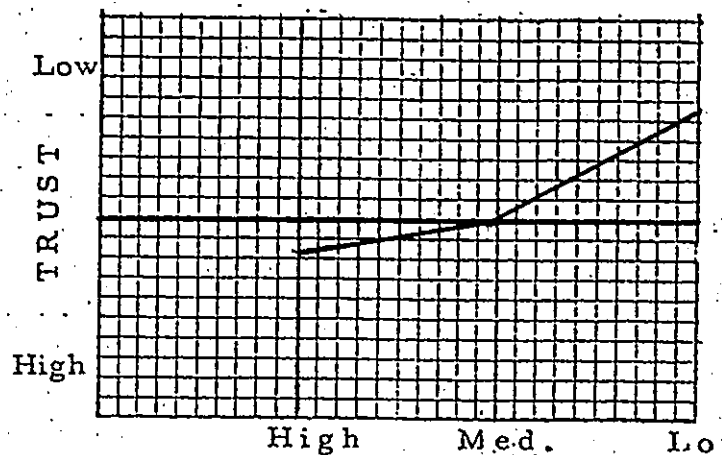
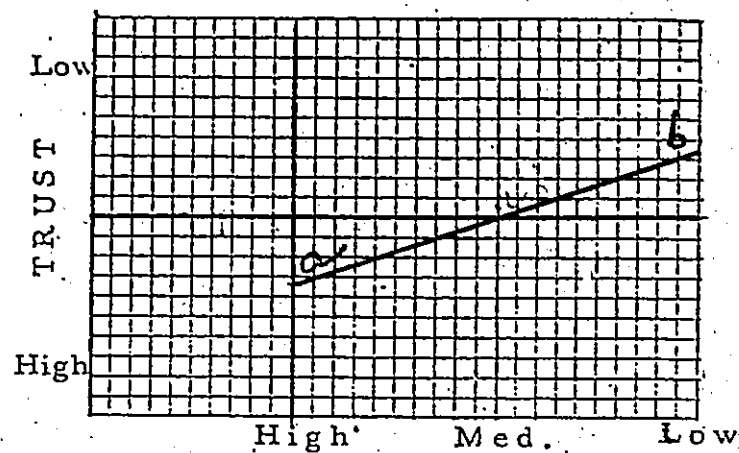
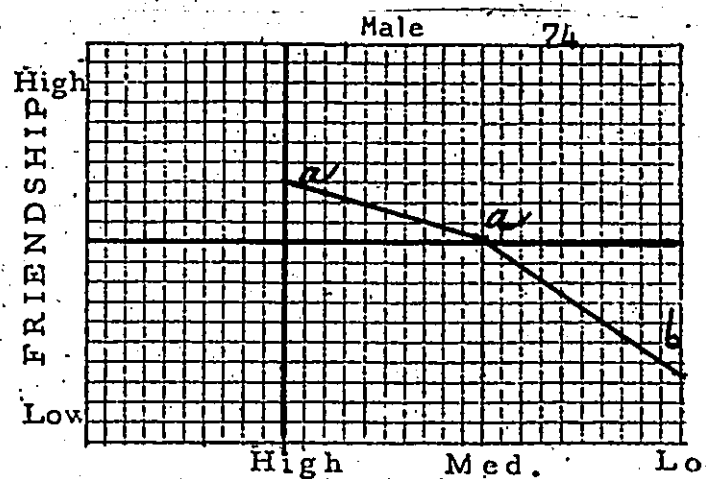
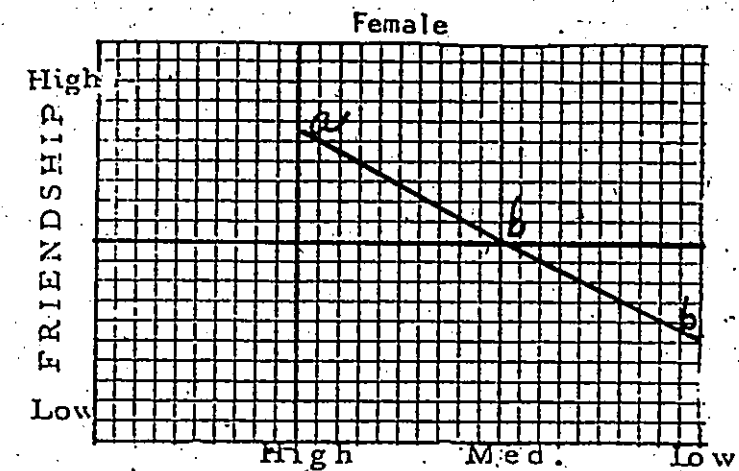


Figure 9. The effect of similarity in Instrumental Expectancy on the dependent measures.

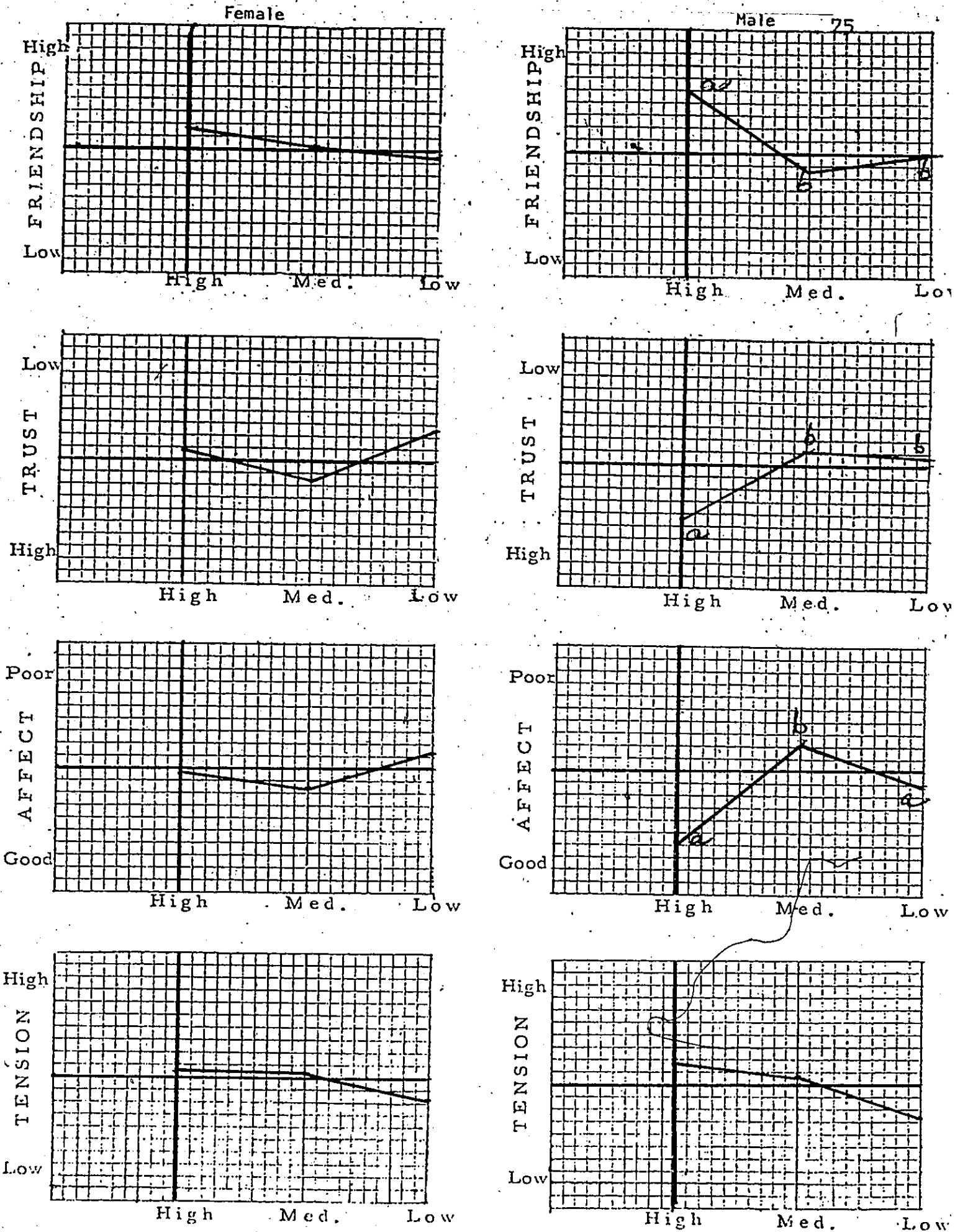


Figure 10. The effect of similarity on the Friendship Index on the dependent measures.

males who were only moderately similar. Males who were highly similar on this dimension reported achieving more Trust and more intimate relationships than males moderately and highly dissimilar on the Friendship Index.

Figure 11 depicts the relationship between Reward Input and the dependent measures. It is evident from the figures that low similarity on the amount of rewards given is associated, for females, with lower Levels of Friendship, lower reported levels of Trust, more dissatisfaction and greater Tension within a relationship. For males, high similarity on judgments about Reward Input was associated with more intimate friendships.

Figure 12 represents the effect of Reward Outcome on the dependent measures. The results were significant for females only. High similarity between female roommate pairs on the amount of rewards received in a friendship was associated with higher levels of intimacy, high levels of Trust, greater satisfaction and, surprisingly, higher levels of Tension.

Figure 13, the last in the series of analyses, depicts the relationship between Distortion and the dependent measures. Of all the independent measures, Distortion appears to have had the largest impact on the dependent measures tapping the quality of relationships among roommates, yielding seven out of eight significant effects. Distortion is defined as the difference between the amount of rewards Roommate A reports receiving and the amount of rewards Roommate B reports

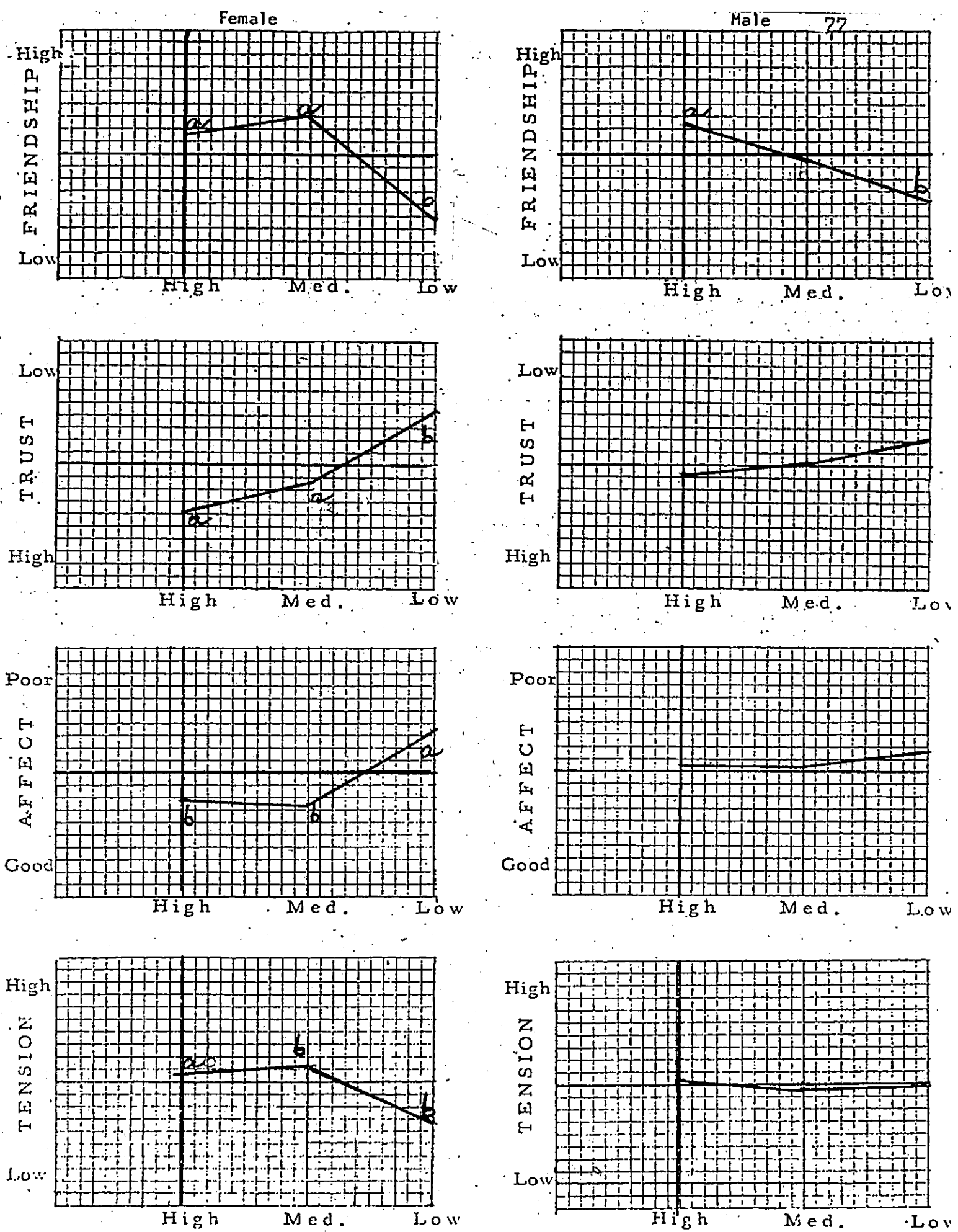
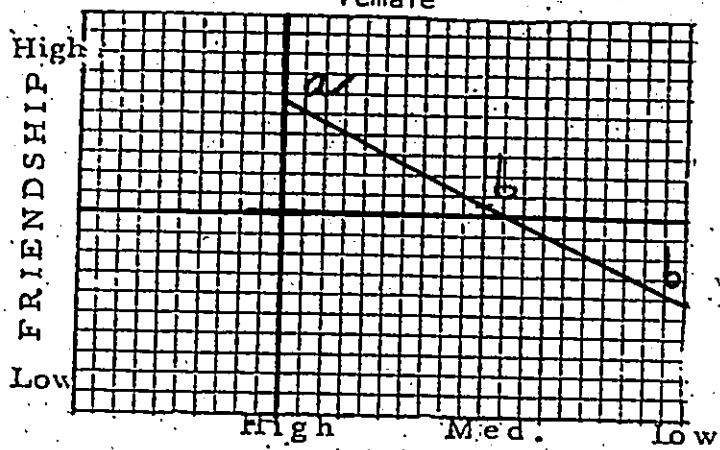


Figure 11. The effect of similarity in Reward Input on the dependent measures.

Female



Male 78

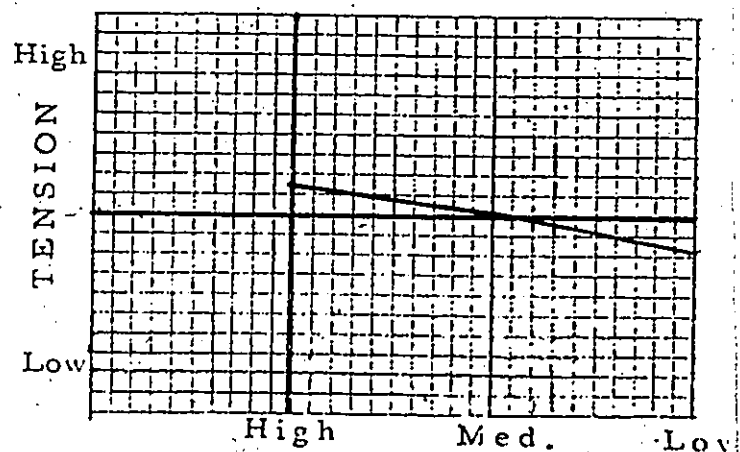
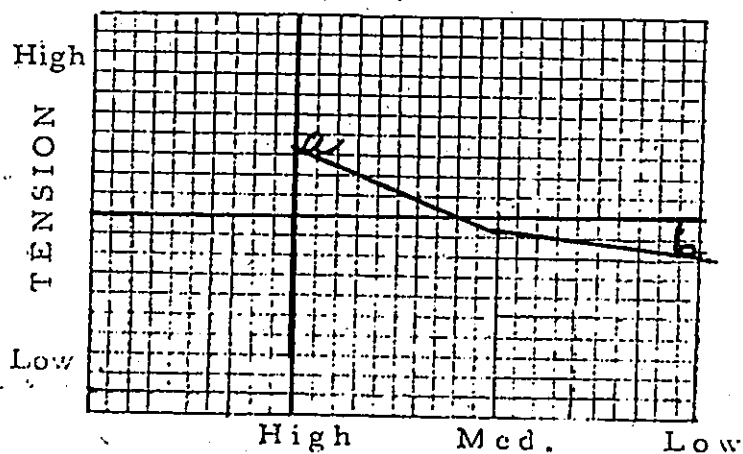
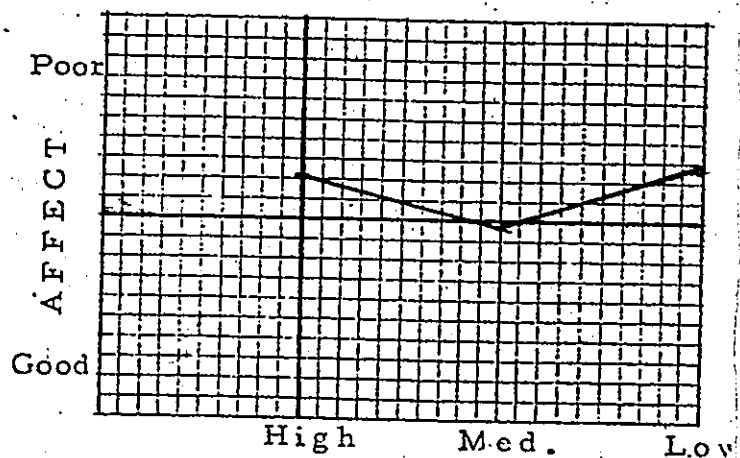
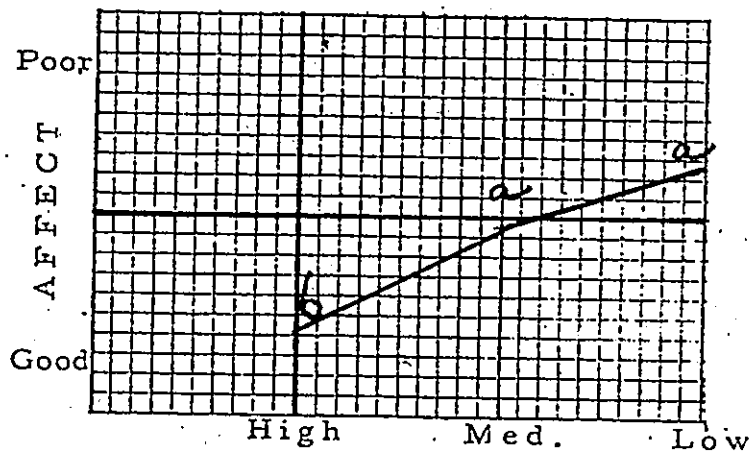
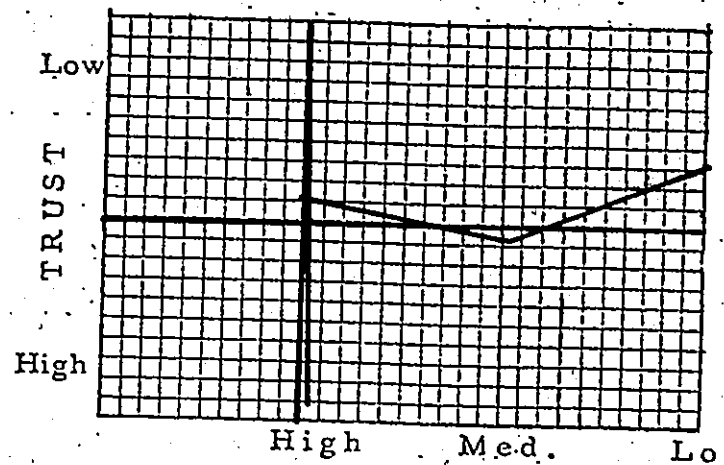
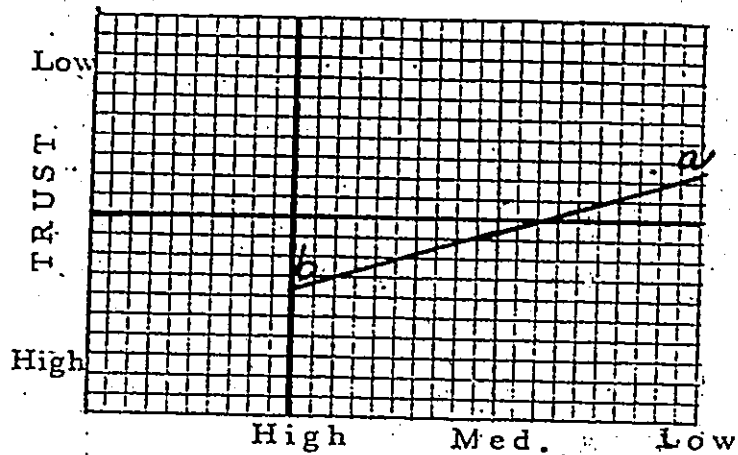
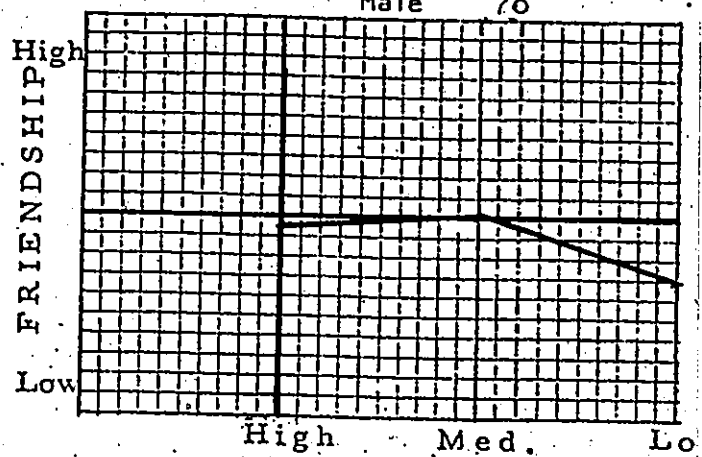


Figure M2. The effect of similarity in Reward Outcome on the dependent measures.

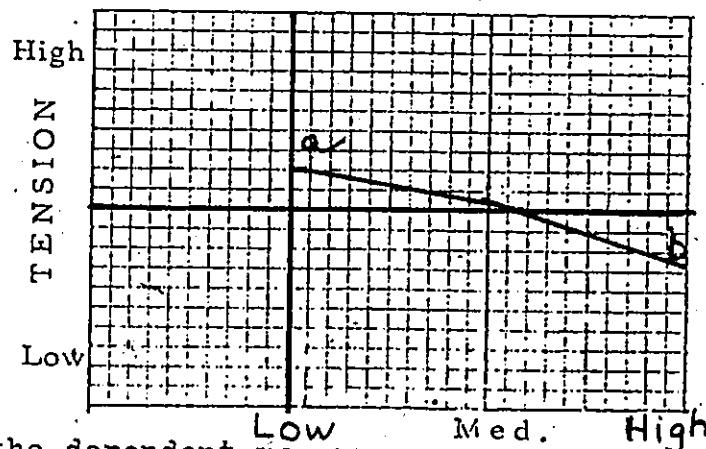
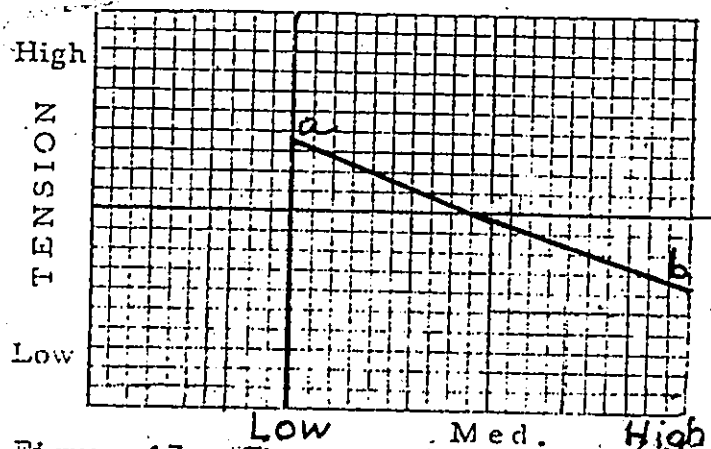
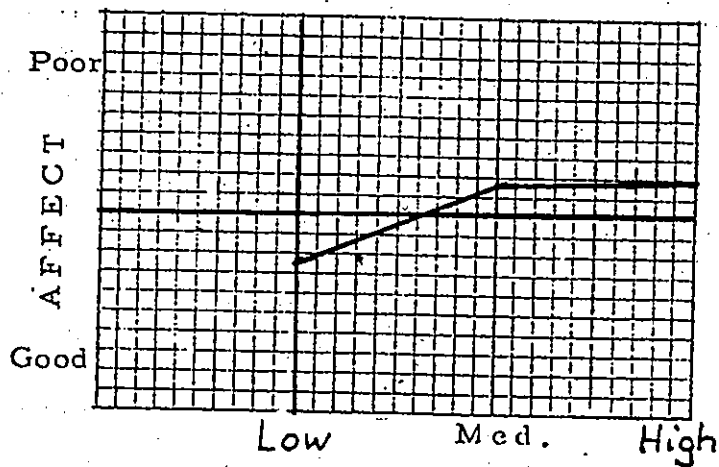
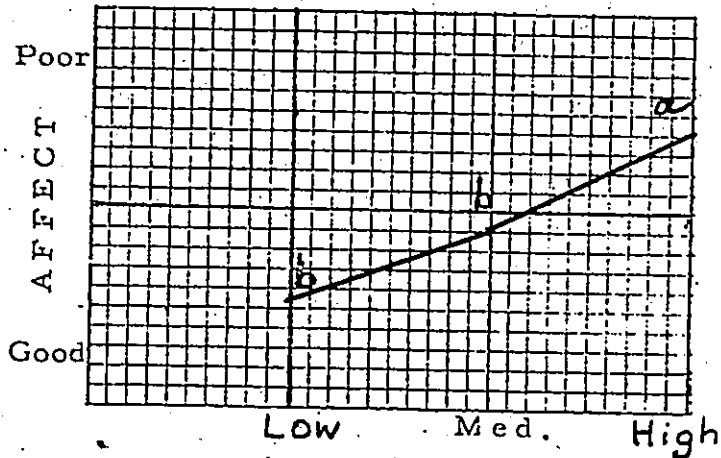
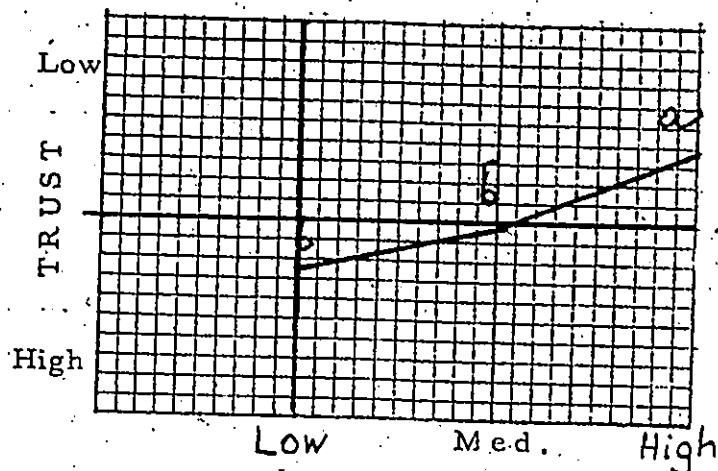
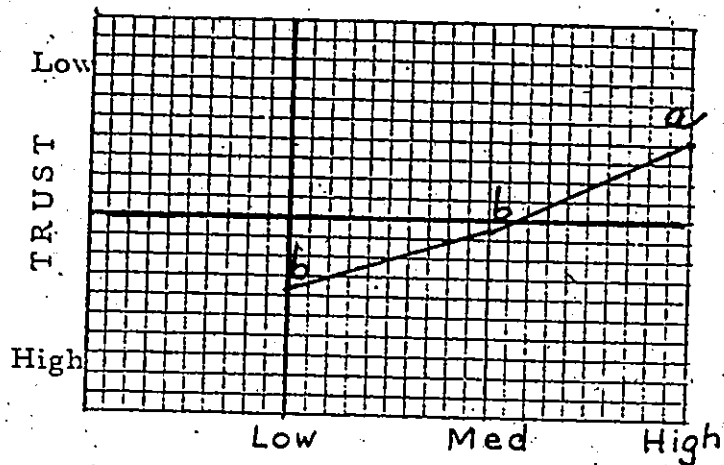
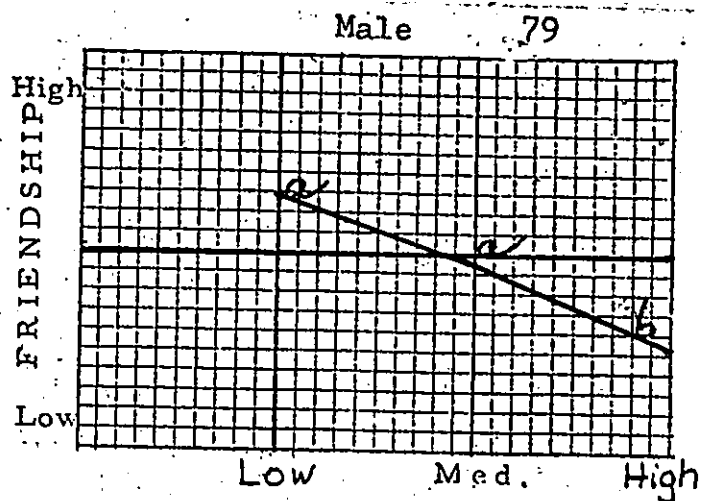
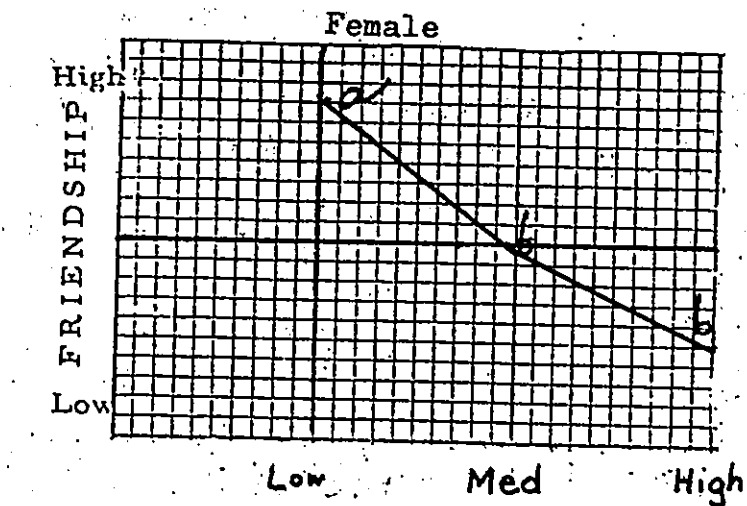


Figure 13. The effect of Distortion on the dependent measures.

giving plus the difference between the amount of rewards Roommate B reports receiving and the amount Roommate A reports giving. For females, low Distortion in levels of reward exchanges is associated with more intimate friendships, with higher levels of Trust and Affect, and, again, with greater levels of experienced Tension. For males, the amount of Distortion is not associated with the degree of Affect, but is instead associated with increasing levels of intimacy, a greater degree of emotional satisfaction and higher levels of Tension.

Table 6 presents a summary of the F-values and significance levels generated by a univariate Analysis of Variance of the various friendship dimensions and the four dependent measures. All Entries have two degrees of freedom. This table reports a wider range of significance levels than the analyses in the figures above depict.

Table 7 (see Appendix B) presents the multivariate analysis of the data. The F-values, broken down by sex, provide a summary figure for each of the independent measures regarding its impact on a combined set of the dependent measures. A significant F-value, then, gives an indication of the overall F-value involving several dependent measures. A significant F based on a MANOVA generally indicates that one of the univariate analyses is significant. The larger the F-value, the greater the number of univariate analyses likely to be significant. It may be observed in Table 6 that the largest F-value was obtained for independent variable of

TABLE 6

Summary Table of F Values: Effect of Dyadic
Similarity on Dependent Measures by Sex

Dyadic similarity variables	Level of friendship	Trust	Affect	Tension
n-affiliation				
Females	1.12	1.13	.64	.84
Males	.42	1.17	.19	2.87*
f-affiliation				
Females	.78	.28	.56	.76
Males	.02	.54	1.64	1.27
c-affiliation				
Females	1.85	2.55*	3.42**	.61
Males	3.46**	1.87	5.06***	.29
Receive/Give				
Females	3.75**	2.06	1.73	.47
Males	.39	2.54*	.19	2.34*
Valence				
Females	1.11	.25	.38	.84
Males	.35	1.22	.39	5.79***
Roommate Fairness				
Females	1.62	.87	.08	.80
Males	1.00	.41	.47	.14
Equity				
Females	2.95*	1.14	2.97*	.54
Males	.46	1.13	.52	2.00
Instrumental Expectancy				
Females	4.77***	2.29	3.56**	3.86**
Males	9.17***	6.21***	5.27***	1.73
Friendship Index				
Females	.17	1.57	.59	.47
Males	2.80*	2.36*	6.06***	3.02**

... (Continued)

TABLE 6 (Continued)

Dyadic similarity variables	Level of friendship	Trust	Affect	Tension
Reward Input				
Females	5.85***	5.83***	3.66**	2.94*
Males	4.00**	1.05	.28	.14
Reward Outcome				
Females	5.49***	2.36*	4.34**	2.54*
Males	1.21	2.25	1.15	.91
Distortion				
Females	9.38***	4.07**	5.26***	4.83***
Males	5.64	4.64***	1.77	2.37*

*p .10

**p .05

***p .01

Distortion. There is a corresponding large number of significant F-values in Table 6 for Distortion. Seven out of eight univariate analyses were significant.

CHAPTER IV

DISCUSSION AND CONCLUSION

Monadic Patterns

The first objective of the present study was to assess the role of n-affiliation within motivational models of Expectancy and Equity. In other words, does n-affiliation exert direct or indirect effects within the model?

The correlations between Valence and Level of Friendship and Expectancy and Level of Friendship were highly significant beyond the 1% level. However, when n-affiliation was partialled out as an intervening variable, differences between the product-moment correlations and the partial correlations were negligible. It appears that n-affiliation does not have a mediating influence within a basic assumption of Expectancy Theory. Instead, its effects tend to be more direct. For example, n-affiliation correlated directly and significantly with Overreward, a gain-maximizing motive in Expectancy Theory.

Individual differences did not seem to play a significant role in mediating Equity relationships either. While significant positive correlations were observed between the trend toward Overreward and the tendency for a roommate to rate himself and his partner as behaving equitably, and between Overreward and Level of Friendship, these relationships were

not influenced appreciably by n-affiliation. Overreward, then, appears not to be perceived as inequitable and strong affiliative drive seems not to intrude differentially upon this perception.

Social Exchange Theory

Expectancy Theory and Equity Theory make different predictions about the consequence of imbalance for the growth of friendship. Equity Theory postulates that an imbalance in the exchange of friendship rewards will lead to perceptions of inequity and the arousal of tension between the partners. Balance, reciprocity and congruence must be maintained at all costs (Adams, 1965; Gouldner, 1960; Newcomb, 1961).

Expectancy Theory, on the other hand, postulates that overreward is a motivational force which propels a person toward achieving higher and higher levels of friendship (Blau, 1967; Greenberg and Shapiro, 1971). Inequity in reward allocation through overreward can actually work as a stimulant to the growth of friendship by creating obligation in the other to reciprocate at still higher levels of friendship. The data strongly support this position through the highly significant positive correlation obtained between Overreward and Level of Friendship. The tendency to Overreward, then, varies directly with the level of intimacy achieved.

A major proposition derived from Equity Theory, however, was not supported by the data. Analysis of the partial

correlation reveals that Tension did not mediate the relationship between Overreward and Level of Friendship. The arousal of Tension during states of imbalance in interpersonal relations is a major tenet of Equity Theory. Therefore, failure to uncover a significant correlation raises serious questions regarding the predictive utility of the theory.

Overall, n-affiliation did not play a significant mediating role in either Expectancy or Equity Theories. Instead, its impact upon the model was more direct. In addition, in testing predictions derived from these theories, strong evidence could be observed in favor of identifying Overreward as being primarily a gain-maximizing motive and less so as an equity notion.

Sex Differences

Prior research has suggested that sex differences may mediate the relationship between affiliation and friendship indices (Fishman, 1966; Pelletier, 1978; Sherwood, 1966; Zuckerbrod, 1976). That males and females differ in the strength of affiliative drive is a finding amply supported by the data. Mean affiliation intensity scores for females were significantly greater than those for males. These scores reflect the increased motivation on the part of women in general to admit to greater emotional satisfaction from interpersonal relationships. Supplementary analysis of the content of TAT protocols (not reported earlier) for males and females revealed persistent differences in the

conceptualization of interpersonal events. The protocols of women tended to be longer and grammatically richer while those of males were more telegraphic. Females exhibited less violence, more elements of nurturance and caring, and a more sophisticated understanding of the motives and emotions underlying characters' actions than did males. They were much more apt to be concerned about the philosophical-moral ramifications of behavior, i.e., the issues surrounding abortion and premarital sex. These were generally females' concerns although males not infrequently alluded to them as well. Females generally were struggling with independence-dependence conflicts, and still, in some instances, tended to confuse love with dependency. These conflicts reflect, in part, the clash between the "consciousness-raising" attitudes ushered in with the advent of the Women's Movement of the sixties and the more traditional values associated with females' role definitions.

The incidence of affiliative conflict was significantly greater for males than for females. Sherwood (1966) noted that the importance of intimacy in friendship was downplayed in males because it conflicted with masculine role prescriptions. The TAT protocols of the males did indeed reveal this greater concern with minimizing the importance and occurrence of intimacy. In particular, there was a marked preoccupation among males with controlling homosexual impulses. These observations reflect, in part, the greater cultural tolerance in our society for the display of affection between

females than between males. The dyadic data, of which more will be said, reveal that c-affiliation is somewhat more predictive for males than for females.

Dyadic Similarity Patterns

The second objective of the study was to explore dyadic interaction patterns along selected parameters and their consequences for the growth of friendship. It is apparent from the aforementioned that the personality configurations of the participants should have some effect on the "flavor" of the friendship and the way in which they interact. The analysis of variance revealed that, for males, moderate and low similarity in affiliative conflict is associated with higher levels of friendship and greater emotional satisfaction for both sexes. One possible interpretation of these results has to do with the method of utilizing average values of a pair of ascriptions. Dyads who are low in similarity on c-affiliation are a more homogeneous group than dyads high in similarity on this dimension and so may report, on the average, higher mean scores on the Friendship Ladder. Individuals who are highly similar in conflict motivation include pairs who are both high or both low on this dimension. High similarity dyads whose members are high in conflict may report having achieved low levels of friendship, while those low in conflict may report high levels. When these two groups are combined their mean levels of achieved friendship may be lower than those reported by the homogeneous group. Dyads from this group who are maximally divergent in

conflict, may consistently contribute a member who reports having attained high levels of friendship and a member who reports a lower degree of intimacy.

Dynamically, individuals who have elevated levels of affiliative conflict would perhaps interact differently from those who are dissimilarly motivated with respect to conflict. Roommate pairs who are both high in affiliative conflict become simultaneously for each other approach and avoidance targets. Perhaps as each achieves greater depths of intimacy, underlying fears of rejection start to become activated in both and cause each member to "retreat" until it is once again deemed "safe" to approach the other. But an individual relatively low in c-affiliation is more motivated in providing friendship rewards and perhaps is better able to gauge the vacillations of his highly conflicted partner and regulate his own approach tendencies more carefully. This strategy may have the effect of giving the conflicted roommate time to evaluate the motives and intentions of his partner which may have been suspect. If these evaluations are favorable, then some of his fear reactions may be extinguished. These dyads who are very dissimilar in their conflict motivation may then report having attained more intense and more satisfying relationships.

With regard to the predictions derived from Expectancy Theory, Instrumental Expectancy proved to be a good predictor of the growth of friendship. Dyadic members highly similar in levels of Instrumental Expectancy reported higher mean

levels of Friendship, Trust, Affect and, surprisingly, higher mean levels of Tension. This latter finding is somewhat perplexing and invites speculation as to its occurrence.

One possibility is that Tension, as measured within this study, is not a negatively-valenced force that implies dissatisfaction, but a positively-valenced one that implies vigilance. Individuals who report higher levels of Tension are more carefully monitoring input-output ratios as Table 1 suggests. Table 1 reveals that roommates who experience higher mean levels of Tension are positively motivated with respect to affiliative drive. Tension may therefore be an arousal mechanism alerting the individual to positive interpersonal cues that may lead to friendship growth. As such, Tension is related to accuracy in social perception and not to distortion in the exchange of interpersonal rewards. This has indeed been found to be the case. Figure 13 reveals that Tension varies inversely for both sexes with the extent of Distortion in judgments about reward allocations.

Blau (1967) views Tension as a motivating force associated with an increase in friendship. Adams (1965) views Tension as the product of inequity, a state which threatens the growth of friendship and causes dissatisfaction. The weight of the evidence seems to favor Blau's contention that Tension is not necessarily inimical to friendship development.

Inequity notions as they relate to friendship growth

are implicit in such variables as Receive/Give Index, Roommate Fairness, Equity, Reward Input, Reward Outcome, and Distortion. Newcomb (1961) has demonstrated that the more a person can infer balance, congruence, and reciprocity in the exchange of interpersonal benefits, the greater is the likelihood of friendship growth. Adams (1965) claims that Equity in reward allocations is an essential component in the maintenance of a friendship. The notion of reciprocity, in social exchange, as reflected in the above variables, has received overwhelming confirmation in the analyses as evidenced by the large number of significant relationships, particularly for Distortion. This particular part of the analyses especially highlights the usefulness of looking at dyadic patterns of interaction in order to be able to make some predictions about the course of the friendship.

The TAT Affiliation Scales

The third major objective of the study was to develop and assess a new scoring procedure based on content analysis of thematic projective material for the purpose of measuring the intensity of affiliation motivation. Affiliation is a particularly relevant variable in the study of friendship formation because it is related to a person's drive toward sociability.

Affiliation is, however, a motive about which an individual may be in conflict. The extent of this conflict, it has been reasoned, can best be understood as the resultant of approach and avoidance motivation (Auld, 1954; Reshbach,

1961; Miller, 1959). An individual may be simultaneously attracted and repelled by the prospect of entering into a friendship-relationship with another. Furthermore, this conflict may influence how one thinks about and behaves in a friendship. Feshbach (1961) noted that approach-avoidance conflicts may lead to defensive responses. The existence and nature of this conflict may not always be wholly accessible to consciousness and self-report measures would not, therefore, be helpful in elucidating elements of this conflict. Projective techniques such as the TAT could be much more useful in this context.

Atkinson's (1958) scoring scheme, although utilizing this projective technique for the assessment of approach-avoidance tendencies with respect to affiliation, is not sufficiently sensitive to clinical indices of such intrapsychic conflict. The scales presented in this study represent an attempt to tap more accurately the extent of this conflict by means of an assessment of its more unconscious elements and its intensity. Although the present study did not attempt to compare Atkinson's scoring procedure with the one presented in this study in terms of differential conflict arousal, it is evident that the present method of conflict assessment was somewhat successful in measuring the intensity of conflict motivation.

Affiliative conflict correlated significantly with various friendship measures and, therefore, has had some impact upon evaluations of friendship reward exchanges and

perceptions relating to the development of friendship.

Increasing levels of conflict have been associated with greater emotional dissatisfaction with a relationship, with the achievement of less intense friendships, and with the tendency to perceive less equity as a feature of those friendships. Affiliative conflict has also been related to a decreased motivation to supply friendship rewards and to the expectancy that the friendship will not progress. Inclusion of this conflict variable helped to uncover certain relationships that n-affiliation alone could not (see Table 6).

In conclusion, some support has accumulated with regard to the validity of conceptualizing conflict in approach-avoidance terms by means of the TAT. In addition, the present study has highlighted the usefulness of measuring conflict responses in terms of the intensity with which they occur in mental life. Affiliative conflict and positive affiliative drive as personality dimensions can influence to some degree the perceptions and evaluations of friendship behaviors.

However, individual differences in terms of strength of n-affiliation, f-affiliation and c-affiliation did not mediate the effects of either Expectancy or Equity Theory as predicted. Instead, the effects of these variables on the friendship models seemed to be direct.

The best predictor of the growth of friendship was Over-reward (Howitt, 1976) and its extent varied directly with

positive affiliative strength. Greater support was achieved for Expectancy Theory than Equity Theory. Tension, a critical intervening variable in Equity Theory, did not mediate the relationship between Overreward and Level of Friendship, a finding which casts considerable doubt on the adequacy of the theory. Overreward was conceptualized as being primarily an approach mechanism and Tension as being a positively-valenced force.

Insofar as dyadic interaction patterns were concerned, substantial support was achieved for the importance of reciprocity in social exchange and for the role of Expectancy in leading to the growth of friendship. Support for the adequacy of Equity Theory in accounting for the achieved levels of friendship in two-person interactions was far less substantial owing to the failure of the intervening variable, Tension, to have any appreciable effects. The usefulness of considering dyadic indices in terms of the measurement of distortion patterns has been demonstrated.

Limitations of the Study

One of the most serious criticisms that can be levelled at the present study is that the roommate role and the friendship role are not synonymous and that these two may be inextricably confounded. The fact that two individuals have been assigned to share accommodations introduces the unwanted side-effects of forced interaction, which may distort the natural processes of friendship selection and development. Operating under the constraint of forced

interaction calls into play the sense of loss of responsibility for doing all one can to increase the level of friendship. One may feel obligated to "get along" with one's roommate in the interest of expediency, that is, so that the relationship does not interfere with academic goals. But one may not feel compelled to "become friends". Therefore, reports of the extent of achieved friendship may have been somewhat distorted.

It was assumed that strong affiliative drive was associated with affiliation deprivation. No attempt was made to explore individual opportunities for motive satisfaction in relationships external to those between roommates. Individuals with a high need for affiliation, that have many friends may be clinically distinct from individuals whose affiliation is aroused through deprivation. The latter group should possibly have a higher incidence of f-affiliation and so may affect the intensity of affiliative conflict.

Finally, individual differences with respect to tolerance of imbalance, of interpersonal tension and the capacity for absorbing interpersonal conflict were not ascertained.

Implications for Further Research

Several avenues for future research are suggested in order to extend the findings presented here. The extent of affiliative conflict can be assessed for different clinical groups in order to determine its influence upon the conceptualizations and development of their friendships. Conflict ratios can be calculated for such diverse groups as schizo-

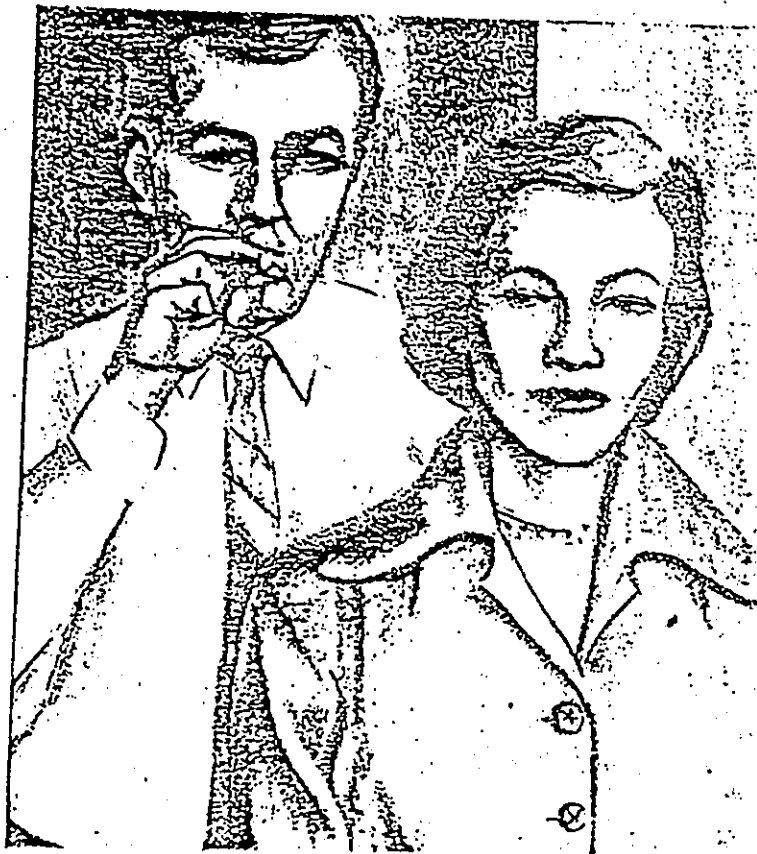
phrenics, manic-depressives and the neurotically depressed. Their scores can be correlated with the extent of distortion in allocation of intrinsic friendship rewards such as positive regard and authenticity as a function of friendship stage. Perhaps it may be possible to distinguish among these groups according to their responses on these dimensions.

It may also be possible to explore the consequences of conflict for the growth of friendship from a developmental perspective. For example, children may differ from adults in the extent to which they can resolve interpersonal crises as a function of affiliative conflict strength.

Finally, the influence of other personality variables can be assessed within the context of the friendship models that have here been considered. The growth and development of friendships and its dissolution can be studied along such parameters as self-acceptance, self-esteem and introversion-extroversion.

APPENDIX A

TAT CARDS TAPPING AFFILIATION













APPENDIX B
MULTIVARIATE ANALYSES

TABLE 7

Summary Table of the Multivariate Analyses of
Friendship Measures and Friendship Indices by Sex

Friendship Measures	F-value	Degrees of Freedom
n-affiliation		
Females	1.11	(12, 162)
Males	1.61*	(12, 146)
f-affiliation		
Females	1.21	(12, 132)
Males	.70	(12, 148)
c-affiliation		
Females	1.06	(12, 136)
Males	1.31	(12, 146)
Receive/Give		
Females	.96	(12, 162)
Males	1.45	(12, 156)
Valence		
Females	1.43	(12, 158)
Males	2.04**	(12, 158)
Roommate Fairness		
Females	1.48	(12, 158)
Males	1.09	(12, 158)
Equity		
Females	1.24	(12, 160)
Males	.55	(12, 158)
Instrumental Expectancy		
Females	2.36***	(12, 162)
Males	1.92**	(12, 158)
Friendship Index		
Females	.83	(12, 160)
Males	1.88**	(12, 158)
Reward Input		
Females	2.02**	(12, 162)
Males	1.05	(12, 158)

...(Continued)

TABLE 7 (Continued)

Friendship Measures	F-value	Degrees of Freedom
Reward Outcome		
Females	1.54*	(12, 162)
Males	.66	(12, 158)
Distortion		
Females	1.97**	(12, 160)
Males	3.04***	(12, 152)

*p .10
 **p .05
 ***p .01

REFERENCES

- Adams, J. S. Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2). New York: Academic Press, 1965.
- Adams, J. S. Effects of overpayment: Two comments on Lawler's paper. Journal of Personality and Social Psychology, 1968, 10, 315-316.
- Adams, J. S. & Rosenbaum, W. B. The relationship of worker productivity to cognitive dissonance about wage inequities. Journal of Applied Psychology, 1962, 46, 161-164.
- Atkinson, J. W. Towards experimental analysis of human motivation in terms of motives, expectancies, and incentives. In J. W. Atkinson (Ed.), Motives in fantasy, action and society. Princeton, N.J.: Van Nostrand, 1958.
- Atkinson, J. W., Heyns, R. W. & Veroff, J. The effect of experimental arousal of the affiliation motive on thematic apperception. Journal of Abnormal and Social Psychology, 1954, 49, 505-510.
- Auld, F. Contributions of behavior theory to projective testing. Journal of Projective Techniques, 1954, 18, 421-426.
- Blau, P. M. Exchange and power in social life. New York: Wiley, 1967.
- Byrne, D. Anxiety and the experimental arousal of affiliation

need.

Journal of Abnormal and Social Psychology, 1961, 63,
660-662.

Clark, R. A. The projective measurement of experimentally-induced levels of sexual motivation. Journal of Experimental Psychology, 1952, 44, 391-399.

Dalack, J. D. The relationship between TAT hostility and self-report hostility as a function of psychiatric condition. Dissertation Abstracts, 1965, 26, 1972.

de Charms, R. C. Affiliation motivation and productivity in small groups. Journal of Abnormal and Social Psychology, 1957, 55, 222-226.

Feshbach, S. The drive-reducing function of fantasy behavior. Journal of Abnormal and Social Psychology, 1955, 50,
3-11.

Feshbach, S. The influence of drive arousal and conflict upon fantasy behavior. In J. Kagan and G. S. Lesser (Eds.), Contemporary issues in thematic apperceptive methods. Springfield, Ill.: Charles C. Thomas, 1961.

Festinger, L. A theory of cognitive dissonance. Evanston, Ill.: Row, Peterson, 1957.

Fishman, D. Need and expectancy as determinants of affiliative behavior in small groups. Journal of Personality and Social Psychology, 1966, 4, 155-164.

Fitzgerald, B. J. Some relationships among projective test, interview and sociometric measures of dependent behavior. Journal of Abnormal and Social Psychology, 1958,

56, 199-203.

Greenberg, M. S. & Shapiro, S. P. Indebtedness: An aversive aspect of asking for and receiving help. Sociometry, 1971, 34, 290-301.

Gouldner, A. W. The norm of reciprocity. American Sociological Review, 1960, 25, 165-167.

Groesbeck, B. L. Toward description of personality in terms of configurations of motives. In J. W. Atkinson (Ed.), Motives in fantasy, action and society. Princeton, N.J.: Van Nostrand, 1958.

Heilbronn, M. A longitudinal study of the development and dissolution of friendship. Unpublished doctoral dissertation, University of Windsor, 1975.

Homans, G. C. The human group. New York: Harcourt, Brace and World, 1961.

Howitt, R. P. E. A self-other attributional model of friendship formation. Unpublished doctoral dissertation, University of Windsor, 1976.

Howitt, R. P. E. & La Gaipa, J. J. A longitudinal study of an attributional model of friendship formation. Unpublished manuscript, University of Windsor, 1975.

Heyns, R. W., Veroff, J. & Atkinson, J. W. A scoring manual for the affiliation motive. In J. W. Atkinson (Ed.), Motives in fantasy, action and society. Princeton, N.J.: Van Nostrand, 1958.

Kerckhoff, A. C. The social context of interpersonal attraction. In T. L. Huston (Ed.), Foundations of

- interpersonal attraction. New York: Academic Press, 1974.
- Ia Gaipa, J. J. Interpersonal attraction and social exchange. In S. W. Duck (Ed.), Theory and practice in interpersonal attraction. London: Academic Press, 1977.
- Lazarus, R. S. A substitute-defensive conception of apperceptive fantasy. In J. Kugan and G. S. Lesser (Eds.), Contemporary issues in thematic apperceptive methods. Springfield, Ill.: Charles C. Thomas, 1961.
- Leventhal, G. S., Allen, J. & Kemekgor, B. Reducing inequity by reallocating rewards. Psychonomic Science, 1969, 14, 295-296.
- Lesser, G. S. Conflict analysis of fantasy aggression. Journal of Personality, 1958, 29-41.
- Levinger, G. A three-level approach to attraction: Toward an understanding of pair-relatedness. In T. L. Huston (Ed.), Foundations of interpersonal attraction, New York: Academic Press, 1974.
- Lindzey, G. & Kalnins, D. Thematic apperception test: Some evidence bearing on the "hero assumption". Journal of Abnormal and Social Psychology, 1958, 57, 76-83.
- Matranga, J. T. The relationship between behavioral indices of aggression and hostile content on the TAT. Journal of Personality Assessment, 1976, 40, 130-134.
- Megargee, E. I. Hostility on the TAT as a function of defensive inhibition and stimulus situation. Journal of Projective Techniques, 1967, 31, 73-79.

Miller, N. E. Theory and experiment relating psychoanalytic displacement to stimulus-response generalization.

Journal of Abnormal and Social Psychology, 1948, 43, 155-178.

Miller, N. E. Extensions of liberalized S-R theory. In S. Koch (Ed.), Psychology: A study of a science. New York: McGraw-Hill, 1959.

Murray, H. A. Explorations in personality. New York: Oxford University Press, 1938.

Newcomb, T. M. The acquaintance process. New York: Holt, Rinehart & Winston, 1961.

Pelletier, C. S. The relationship between reported affiliative needs of women and their self-disclosure behavior. Dissertation Abstracts, 1975, 35, (8B), 4192-4193.

Pittluck, P. The relation between aggressive fantasy and overt behavior. Unpublished doctoral dissertation, Yale University, 1950.

Pritchard, R. D. Equity theory: A review and critique. Organizational Behavior and Human Performance, 1969, 4, 176-211.

Pritchard, R. D., Dunnette, M. D. & Jorgenson, D. O. Effects of perceptions of equity and inequity on worker performance and satisfaction. Journal of Applied Psychology Monograph, 1972, 56, 75-94.

Rabin, A. I. Projective techniques in personality assessment. New York: Springer Publishing Co. Inc., 1968.

Rogers, C. W. Relationships of projective to direct expres-

- sion of selected needs for non-psychotic subjects. Perceptual and Motor Skills, 1973, 36, 571-578.
- Sherwood, J. J. Self-report and projective measures of achievement and affiliation. Journal of Consulting Psychology, 1966, 30, 329-337.
- Shipley, T. E. & Veroff, J. A projective measure of need for affiliation. Journal of Experimental Psychology, 1952, 43, 349-356.
- Simmel, G. The sociology of Georg Simmel. Trans. by K. H. Wolff. New York: Free Press of Glencoe, 1950.
- Tolman, E. C. Principles of performance. Psychological Review, 1955, 62, 315-326.
- Tomkins, S. S. The thematic apperception test. New York: Grune & Stratton, 1947.
- Vroom, V. H. Work and motivation. New York: Wiley, 1964.
- Walster, E., Walster, G. W. & Berscheid, E. New directions in equity research. Journal of Personality and Social Psychology, 1973, 25, 151-176.
- Wood, H. D. & La Gaipa, J. J. Predicting behavioral types in preadolescent girls from psychosocial development and friendship values. Paper presented at annual meeting of the Canadian Psychological Association, Toronto, June, 1978.
- Zubin, J., Eron, L. D. & Schumer, F. An experimental approach to projective techniques. New York: Wiley, 1965.
- Zuckerbrod, P. The influence of need affiliation upon interpersonal attraction. Dissertation Abstracts, 1976, 36 (7-B), 3587-3588.

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